APPLIED ECONOMICS

The Application of Economic Principles to the Problems of Economic Life

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OF ECONOMIC PRINCIPLES TO THE
PROBLEMS OF ECONOMIC LIFE

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PREFACE TO THE FIRST EDITION

AMONG the many criticisms which have been launched against economic theory by those who would discredit it, has been the assertion that it has no practical application. As evidence of this it has been noted that in general economics texts which contain a section on economic problems, there is very little connection between the discussion of the problems and the presentation of principles which has preceded it. Some color is also lent to the criticism by the tendency of many economic theorists to pursue the niceties of doctrine without attempting to link them with the pressing questions of economic welfare which confront society. In the opinion of the present writers, however, the charge cannot be sustained. We are convinced of the value of economic theory, and we believe that by an understanding and application of its principles the prosperity of society can be definitely advanced and many of the perplexing difficulties which interfere with our economic progress can be removed. It follows that economic theorists should be welfare economists as well as pure scientists, for by training and knowledge they are best equipped to grapple with the task of economic reform. If they do not undertake it, it must be left to propagandists and tyros whose inadequate equipment foredooms their projects to failure. This, then, is the point of view from which the present work has been written. As its title implies, it is an attempt to apply the principles of economics to the problems of economic life. It is expected that the reader will have acquired a fair grasp of these principles before undertaking its study. The book is offered in the hope that it may contribute to a greater appreciation of the value of economics, and to a more general understanding of the means by which economic progress may be promoted.

In order to bring out more clearly the relation between principles and problems, it has seemed desirable to adopt an arrangement somewhat different from that of most text-books in this field. Following the time-honored division of economics into consumption, production, exchange, and distribution, the topics have been grouped into four corresponding parts, with the addition of two other parts, devoted to the economic aspects of government and comprehensive programs of social policy, respectively. This approach has resulted in the separation, for treatment in different parts, of subjects that have usually been handled as a unit. For

instance, other works on economic problems generally contain a section devoted to "labor problems," wherein such matters as factory legislation, the employment of women and children, trade unions, unemployment, wages and the like, are discussed. Some of these questions, however, are primarily matters of production, and others of distribution, while most of them involve the broad question of the relation between government and industry as a whole. Accordingly, we have divided the consideration of these questions, singling out their various phases for separate treatment under whichever of these general heads seemed most appropriate. Again, the development of monopolies has been treated as one phase of the trend toward integration in industry, which is discussed, as a problem of productive relationships, in Part II; but the control of monopoly prices is treated as a problem of exchange, in Part III; while the whole question of trust regulation is so intimately tied up with the controversy over the functions of government that it is reserved for development in Part V. Other illustrations will no doubt be noticed by the reader as he follows the course of the discussion. We believe that this is a more logical arrangement than the one usually adopted, and that it has the added merit of showing how intimately each section of economic principles is involved in the varied phases of our industrial life. It shows, too, how closely interdependent the different aspects of industry are.

It is needless to say that, in this age of specialists, no two persons can pretend to be authorities on all the subjects included in this volume. Our only justification for attempting to cover so wide a field is that it is necessary for someone to bring together the material here presented in order that general readers and students who cannot hope to go deeply into every economic problem may be able to get some understanding of them by a general survey. The most that we can hope to have accomplished is to have recorded the gist of what those who are working intensively in the various fields of applied economics are discovering and thinking. Yet it would not be fair to these authorities for us to disavow our responsibility for the way in which we have assembled the results of their work. Where there is rather general agreement among economists on the desirability of this or that project, we have sought to record it carefully; but sometimes the judgments expressed are our own, and must be taken merely as expressions of our opinions.

THE AUTHORS

University of Pennsylvania,
October 1927

PREFACE TO THE THIRD EDITION

In the preface to the second edition of this book we wrote: "Inasmuch as this work endeavors to set forth the general principles by which economic progress may be promoted, there is a sense in which it does not soon become out of date, for, if we look at economic problems in their proper perspective, they do not change greatly in a few years' time." This statement is as true now as it was then. Nevertheless, the *facts* of economic life change somewhat, so that it becomes necessary to change the discussion of how principles are to be applied to current problems. Besides, one's thinking progresses as the years pass, so that a restatement of views is sometimes desirable. So, in the second edition, we found it wise to do a certain amount of revision. New chapters were added, dealing with Achievement and Failure in Our Industrial System, and with The Plight of Agriculture. Sections were also included dealing with Fascism, and with Economic Planning. A good deal of material was introduced devoted to a discussion of "New Deal" recovery policies, and a number of chapters were altered in various respects.

In this third edition, we have found occasion for still further changes. There is a new chapter on Social Security, instead of the former chapter on Unemployment, and the chapters devoted to Business Cycles and to Communism and Fascism have been largely rewritten. Elsewhere, increasing attention has been paid to the growth of industrial concentration, the new labor situations developed by the rise of the C.I.O. and the National Labor Relations Board, and the control of exchanges by the Security and Exchange Commission. There is also a new discussion of the changes in our banking system wrought by recent legislation, the ideas of the "neutral money" school, agricultural crop control, the growth of trade barriers, especially of exchange control, new revenue legislation, and the development of such governmental ventures as the Tennessee Valley Authority. In addition, statistics and charts have been brought up to date wherever possible. There have been many minor changes, and the Suggestions For Further Reading have been carefully revised to include recent literature. It is our hope that these changes will make the work more useful and timely to both teachers and students.

The Authors

June, 1938.

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THE help and counsel of many friends and associates have been of great value to us in the preparation of this work. It is a pleasure to record our debt of gratitude to the many economists who have laid the foundations upon which we have built, to the men who have supplied us with useful data or have taken the pains to read and criticize portions of our manuscript, to publishers and authors who have permitted us to reproduce charts or tables, and finally to our wives, who have patiently supported us and endured our shortcomings during many months of trying toil. We desire especially to thank Dr. H. W. Laidler, of The League for Industrial Democracy, for his constructive criticism of Chapters 28 and 29; Mr. Harold Kellock, of The Soviet Information Bureau, for his assistance in the preparation of Chapter 29; and the following of our colleagues on the faculty of The Wharton School of Finance and Commerce who have performed a similar service in connection with the chapters attached to their respective names: Professor W. E. Fisher (Chapter 4), Dr. F. B. Ward (Chapter 7), Professors C. C. Balderston and Paul F. Gemmill (Chapter 8), Professor Carl Kelsey (Chapter 10), Professors J. R. Doubman and H. J. Loman (Chapter 11), Professor E. M. Patterson (Chapters 12, 15, 17 and 18), Professor W. C. Schluter (Chapter 16), and Dr. C. P. White (Chapters 23 and 24). Specific acknowledgment to particular authors upon whose writings we have drawn will be found in the footnotes and "Suggestions for Further Reading" appended to the several chapters.

We are indebted to Messrs. Philip L. Howell and Delbert A. Snider for valuable assistance in connection with the work of revising for the third edition.

THE AUTHORS

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PART I

AN APPROACH TO THE PROBLEMS OF APPLIED ECONOMICS

CHAPTER I

ECONOMIC SCIENCE AND ITS APPLICATION

The Purpose and Method of Scientific Study.—We are about to set forth upon a journey into the realm of applied economics. Before our actual departure, it would be well to consider the object of our excursion and the route which we are to follow. In other words, we should have a clear understanding of what applied economics is, and of the subjects which are included within its scope. Economics is a science. As such, its purpose is to make the world a better place in which to live. This statement may be doubted by some, for it is often said that science is the outcome of human curiosity rather than of any seeking after welfare, and that scientists are engaged primarily in the pursuit of knowledge for its own sake, rather than for any practical application which can be made from their discoveries. But this is only a part of the truth. No doubt some scientists are actuated by no other motive than curiosity about the world they live in, and they may have no more tangible goal in sight than the pursuit of truth; yet the final result of scientific activity, and the ultimate justification for its existence, is to be found in its contributions to the progress of civilization. When Faraday experimented with the effects of a galvanic current upon the leg of a frog, he may never have dreamed of the tremendous possibilities that would some day result from man's knowledge of electricity. But we now know that the painstaking researches of pioneers in physics have been abundantly justified in the wonders of electrical power and communication which we enjoy today. Economics, likewise, has its contribution to make in the practical improvement of the world in which we live. Our present quest will be an attempt to find out what are these possibilities.

But the application of science to the solution of practical problems must be distinguished from science itself. The essence of science lies in its method of study. That method is one of painstaking, impartial gathering of facts, and careful formulation of the laws and principles which the study of those facts reveals.[1] Someone has said that science is simply the accurate description of phenomena. The statement is apt, for it is the province of pure science to describe things—and to describe them just as

[1] A science may be defined as a body of known facts, classified and correlated, with laws and principles deduced from them describing the behavior of the subject-matter with which the science deals.

they are, exactly and truthfully, without bias or prejudice. It is important to emphasize this last phrase, for the introduction of bias into scientific work is sure to interfere with the discovery of truth. We must accept what the facts reveal, whether we like it or not. We may find it disagreeable to learn that eating too much meat produces Bright's disease, but if the facts of physiology show this to be the case, we must not allow our preference for meat to blind us to it. In Columbus' time it was a popular belief that the world was flat, and the stubborn prejudice of people against the view that it was round long prevented the establishment of what we now recognize as scientific truth. Pure science is no respecter of persons or prejudices. It is not concerned with things as we would like them to be, but only with things as they are.

It does not follow, however, that *in selecting a subject* for scientific inquiry, we should not be influenced by human desires and problems. Pure science wholly abstracted from such desires and problems is almost unthinkable. Philosophically considered, no doubt, a *purely* scientific description of the world we live in would be a colorless account of animate and inanimate nature, without reference to any particular interests or needs that we might have; but our finite minds are quite incapable of such an intellectual feat. Anyway, it would be a foolish proceeding, because it would include a great deal of analysis of no immediate concern to mankind. Accordingly, scientists confine their studies mostly to fields that have some practical importance, knowledge of which will be helpful in the solution of some concrete problem. So the selection of a field for study is not in itself a scientific act; but, once the selection is made, the strictly scientific pursuit of the study ensues, and the relevant phenomena are described as accurately and impartially as possible.

Given the findings of pure science, we may apply them to the solution of the problems in which we are interested. Here again, however, we are faced with non-scientific considerations, for the very existence of a problem implies the making of moral judgments which lie outside the realm of science. A problem to be solved implies an end to be attained, but science does not tell us what ends are ultimately good and desirable. The problem may be that of prolonging human life. It implies that the lengthening of life is desirable; but we accept this on intuitive or ethical grounds; we cannot prove it by scientific demonstration. Or, the problem may be that of building a beautiful house; but our esthetic feelings, not science, must guide us in deciding what type of architecture is the most artistic. When we have decided the end to be sought, however, we can proceed to attain it in a strictly scientific way; for our knowledge of scientific laws will tell us that certain causes will lead to certain effects, and we have but to apply this knowledge to accomplish the desired result. So, if we agree upon the desirability of a longer span of human life, the laws of health

developed by the medical sciences will show us how to bring it about, and if we decide upon an Elizabethan type of home as the one that is most beautiful, scientific knowledge of building materials, stresses and strains, insulation, and the like, will enable us to build one that will be both economical and substantial. Such application of scientific principles in the attainment of ends deemed desirable is known as applied science.

Our analysis indicates that four steps are required in the development of applied science. They are: (1) determining the field of interest—an essentially non-scientific proceeding; (2) careful observation of the facts in this field, and the working out of descriptive laws or formulas concerning them—pure science; (3) formulating a judgment as to the desirability or undersirability of certain conditions, events, or institutions within the field—a matter of ethics; (4) applying the findings of the science to the attainment of the desirable or the elimination of the undesirable things —applied science.

Pure Economics, Economic Ethics, and Applied Economics.— In the present volume we have chosen economic phenomena as the field to be studied. Economics is the subject which treats of this field, and it has three phases, which correspond to the last three steps of the above analysis. These three phases we may call pure economics, economic ethics, and applied economics, respectively. Pure economics is the science which describes the industrial activities of men, just as they are found today in the world about us. It tells, for instance, of the existence of specialization and exchange in the productive organization, of how the prices of commodities are established, and of how the income of society is distributed among the various agents of production which help to create it. But it has nothing to do with the goodness or badness of these institutions, nor is it concerned with their improvement. Some critics of economic science have objected to this detached and almost cold-blooded analysis. They are so impressed with the defects of our economic organization, and so zealous to reform it, that they are impatient with the painstaking, impartial survey of the careful scientist. They feel it is a waste of time to analyze so laboriously features of the existing structure which, in their judgment, are so obviously undesirable that they should be done away with. They are irritated at the economist's emphasis on wealth, for they feel that the important thing is welfare. But these well-intentioned people are mistaken. How can we be sure what changes this or that institution is in need of until we have examined it minutely and learned to understand it completely? And if we do find it unsatisfactory, how are we to propose a trustworthy solution unless we are first equipped with a thoro understanding of the laws which operate in economic affairs? Pure economics is the necessary foundation to any program of economic reform, and without this foundation no real and lasting progress is likely to be made.

Given the findings of pure economics, we are ready to pass judgment upon economic institutions, to determine how far they contribute to our well-being, and how far they are in need of correction. In making such a criticism we are compelled to introduce some ethical standard or norm of welfare. This makes it primarily a matter of economic ethics; and tho it makes use of the findings of science, it is not in itself a strictly scientific analysis. Pure economics deals exclusively with what is, but economic ethics is concerned with what ought to be. It involves the testing of existing institutions in the light of certain ethical standards set up as a criterion, and the formulation of goals of progress to be achieved in our economic evolution. Whether production is efficient or inefficient, whether the management of industry should be in the hands of private enterprizers or of the state, what is the most desirable-sized population for a given nation, how income ought to be distributed—these and a great many other questions fall within its purview. In seeking an answer to them our judgments may be based on scientific knowledge of the consequences which follow from this or that arrangement, but in the last analysis our final criterion of justice—our standards of right and wrong—must be based on ethical considerations.

Given such judgments of the goodness or badness of existing institutions, and having formulated the goal of economic progress, we are in a position to lay down a program of reconstruction. This is the task of applied economics. Such a program can be set up in a strictly scientific way. Applied economics, therefore, may properly be characterized as a science; but we must not lose sight of the fact that it is founded upon economic ethics. An illustration of how applied economics goes about its task will make the nature of the subject, and its relation to economic ethics, more clear. Suppose we were to decide, in view of certain ethical standards, that greater equality of incomes in society would be desirable. It would be the task of applied economics to set forth a method by which such greater equality might actually be attained, if possible. We might find that, by the application of economic laws to the problem, a solution could be worked out. In this case, the decision as to whether greater equality was desirable would be a matter of ethics and not of science; but the working out of measures for the attainment of such equality would be a strictly scientific proceeding, if carefully done. Similarly, if we were to decide that overpopulation was an undesirable condition for a nation, economic science could tell us how to avoid this difficulty.

So we see that applied economics rests upon pure economics and economic ethics as its foundations. Both of these are essential. In this book a knowledge of economic principles will be assumed, and we shall have occasion to make use of these principles again and again as we proceed. The remainder of the present chapter will be devoted largely to the setting up

of certain criteria of economic welfare which we may employ in our later analyses. Having decided what our standards of the good and desirable in economic matters are to be, we may apply them to the testing of various economic institutions. Finally, we shall be able to suggest measures which will help in correcting some of the defects in our industrial life, and in promoting the more rapid development of economic progress.

The Role of Judgment in Applied Economics.—The reader must not suppose that these suggestions for reform will always be the final word of science upon the problem at hand. The problems presented by our economic life are so complex that it is not always possible to say exactly how they should be solved. Even tho we can discover what are the factors to be reckoned with, we cannot measure them exactly enough to say what is their relative importance. Even the pure science of economics is far from perfected, and the applied science is only in its infancy. So we are forced to rely upon judgment as to what is the best course of action in a given situation. A knowledge of economics is a valuable aid to the making of such judgments, and measures of improvement based upon such knowledge are much more likely to succeed than those proposed by persons lacking in such a background, but they are not infallible. In many cases more than one possible way of correcting a difficulty seems open. Here differences of opinion as to the wisest course of action may arise, even among experts. On the other hand, there are many times when there is substantial agreement among economists, not only as to the defects of our present industrial system, but as to the most hopeful means of correcting them. Where this is true the analysis and proposals of this volume will merely record the collective judgment of economists generally. In other cases the proposals for reform must be taken as an expression of opinion by the present writers. Always, however, an attempt has been made to examine the proposals in the light of the facts and economic principles involved, and to base the proposed remedies upon scientific reasoning.

The Social Point of View.—In the analysis of economic problems we must not forget that economics is a social science; that is, it deals with human beings in relation to each other and not with individuals as separate entities. Hence, our concept of progress is a group concept. We are concerned with the welfare of society as a whole, not with that of any one person or group of persons. It is important to stress this because most persons, in passing judgments upon economic phenomena, are inclined to be influenced by their own particular interests, forgetting that the interests of others may be just as important as their own. There are times when the well-being of one member of society is in conflict with that of his fellow citizens. In such a case, if he is in the minority, their interests should take precedence over his. It is not always easy so to detach oneself from one's personal interests and view the community in the large. A

manufacturer of woolen goods, for instance, would find it difficult to pass an unprejudiced judgment upon the value of tariff protection to this country, because he makes his living in an industry, the very existence of which is dependent upon the maintenance of protective duties on woolen goods. Yet if it is true, as many economists believe, that such tariffs benefit a special class of favored individuals at the expense of a great multitude of consumers, fair-minded judgment would compel us to decide that such tariffs should be abandoned for the sake of the general welfare. Likewise, a laboring man might find it hard to arrive at a correct judgment concerning the desirability or undesirability of such trade-union practices as those tending to limit the output of labor. Yet from the standpoint of social welfare we might find it necessary to condemn such practices. The attitude we should assume has been aptly expressed in the phrase "the greatest good to the greatest number." Let us then forget any prejudices which we may have acquired from our own selfish interests in life, or from the environment in which we have been thrown, and be prepared to consider the problems confronting us in the cold light of reason, allowing ourselves to accept whatever conclusions we are led to by the logic of careful analysis, remembering always that our judgments must be based on the welfare of the community.

General Welfare and Economic Welfare.—But what is the welfare of the community? Generations of philosophers have sought the answer to this question. The discovery of an ultimate standard of what is good or desirable is one of the chief problems of ethics. Some thinkers believe that it is possible for science to give the answer, but it is a question which appears to be beyond the realm of scientific investigation. Ethicists themselves do not agree concerning it. The best that we can do is to express in a general way that which we feel we are striving for. An exact definition of welfare, therefore, is almost impossible to secure. Perhaps the ultimate goal of human activity is the attainment of maximum happiness. Perhaps it is to secure the fullest expression of our latent capacities. Maybe these are but two different aspects of the same thing. Whatever it may be, the welfare of the people depends upon a great number of influences. It involves such matters as codes of morality, education, religious ideals and observances, the cultivation of beauty, the development of material science, and the whole of our existing culture.

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Fortunately, we do not have to deal with so vast a problem, for our concern is only with *economic welfare*. By that we mean such part of general welfare as is dependent upon, and influenced by, industrial activity and industrial institutions; for economics, it will be remembered, is the social science which deals with the industrial activities of man. Altho economic welfare is only one phase of general welfare, it is an important phase, for general welfare depends very largely upon economic conditions.

For instance, in the making of cotton textiles children may be employed. This employment may have important effects for good or evil upon their whole future lives. Their welfare is closely bound up with their economic situation. Again, one's happiness depends, at least to some extent, upon his ability to earn a living. It is rather difficult to have genuine welfare in a state of poverty. In fact, most of those things which go to make up the higher and nobler aspects of existence, such as art, music, social intercourse, travel, and the like, rest upon an economic foundation. Therefore, while admitting that economic welfare is neither the sole nor even the chief goal of living, it is so important a part of the general welfare that it merits a great deal of thoughtful attention.

On the other hand, we cannot consider questions of economic welfare entirely apart from their effects upon other aspects of welfare, for often one reacts upon the other in such a way as to preclude their separation. For instance, we shall learn presently that economic welfare is promoted by increasing the production of goods, but that the beneficent effects of this increase might be counterbalanced by injurious effects upon health or morals, if the goods are not of a meritorious sort. Again, the increase in production would not be desirable, if it was accomplished by methods which interfered with the lives or health or happiness of the workers. So we shall find it necessary to link our discussion of economic matters with broader considerations of general welfare from time to time.

Economic Welfare or Prosperity.—It is easier to arrive at a definite concept of economic welfare than it is to define general welfare. Economic welfare is closely identified with the concept of prosperity. In fact, the two things are almost the same. We can obtain a more concrete understanding of them if we will consider what is the purpose of economic activity. The whole of our industrial process is directed toward supplying us with the means of gratifying our desires—that is, with the commodities and services which we consume in our daily lives. These commodities and services are called by the economist *income*. Now it is important that the goods which go to make up the income stream should be of a desirable kind, for if our economic activities are devoted to the attainment of things which contribute little to our genuine well-being, they have been wasted. Just as an individual may squander riches in extravagance and dissipation, deriving from them little of real utility or lasting worth, so a people may misspend their energies, diverting their productive power into the making of useless or even injurious things, such as instruments of warfare, intoxicating liquors, or noxious patent medicines. When we come to decide between those things which are good and those things which are bad to produce, however, we are again confronted with the difficulty of formulating any general criterion of welfare. Economics gives us no test by which we can classify the products of industry into the desirable and the unde-

sirable. We can only exercize our judgment, based on prevailing standards of morality and our own feelings and reason.

Granted that we are producing goods of the sort which are most useful to man, it is desirable to have them in abundance. That nation whose productive power is great, and whose industries yield a rich flow of goods, has the means of maintaining its people in plenty. An aggregate income sufficient to provide each member of the population with the means for a comfortable standard of living is, therefore, the next essential of economic welfare. Without such an income no nation can really be said to be prosperous. The abolition of want and the promotion of plenty—surely this is one of the goals of economic progress.

Yet another factor must be included in our concept of economic welfare. It is not enough that we should produce the right things and produce them in abundance; we should seek to produce them with the minimum expenditure of effort and energy. That is to say, our production must be efficient. If there is waste of materials or labor power in the carrying on of industry, we are producing less than we might. If our operations are carried on irregularly, in alternating cycles of activity and inactivity, our productive power is not being fully utilized, for it is not continuously employed. And if, in our productive operations, human lives are sacrificed, diseases are needlessly engendered, or character and personality are crushed or distorted, we are falling short of attaining the maximum welfare. A nation might be able to make itself rich by working its people under a system of slavery, but from the social point of view we should not regard its condition as one of general prosperity. The welfare of a people is enhanced every time the loss of material or energy or character is reduced or eliminated.

When we have produced wealth of a desirable kind, as abundantly as possible, and in the most efficient manner, we must see to it that its benefits are widely diffused among the people. Mere aggregate wealth is of little significance unless an ample share of it is enjoyed by all. No matter how great the income of a nation, if it is so unequally divided that a few citizens are immensely rich while many others are poor, that nation is not truly prosperous. A small part of it is in a state of economic welfare, but the rest is not.

Economic welfare, then, depends upon an income: (1) composed of those goods which contribute most to the general welfare (that is, which are most beneficial to man); (2) large enough to provide a comfortable standard of living for the people; (3) produced in the most efficient way; and (4) widely diffused among the members of society. Putting it more concisely, we may say that *economic welfare consists in the efficient production and wide diffusion of a large income made up of beneficial goods.*

Social or National Economy.—This concept of economic well-being

is confirmed by an analysis of what is meant by social or national economy. The word economics is derived from the same root as the word economy, and economics used to be called political economy—that is, the economy of a nation. It is the purpose of our economic organization to achieve economy in our industrial life. Economy is necessary because our desires are almost boundless, while the means of gratifying them are scarce. We must economize in the use of the means of production, by making them contribute as much as possible to the satisfaction of our desires. To do this requires that we should devote our resources only to things which are most important, leaving those of lesser significance unprovided for. It would surely be wasteful to devote our productive efforts to trivial or injurious things if important wants are thereby neglected. But even if we eliminate the injurious and more or less useless products of industry, many things are going to be scarce which would add materially to our comfort and happiness. To make our income as large as possible, therefore, is the second task of economy. To bring our income to a maximum, we must make the technique of production as efficient as possible. If we do not work carefully, we may waste some of our productive resources or lose valuable labor power or destroy needed materials, all of which is a sheer loss of economic effort and income. Efficient production, therefore, is the third test of economy. After we have produced the right things in the most efficient manner we have yet to get them into the hands of the right people. We know that there is no use in producing an ingenious machine if, when it is finished, it gets into the hands of a person who does not know how to employ it. The same principle applies to the national income. What end is served by the production of great wealth if it is put in the hands of people who will squander it in extravagance and frivolity, while others are left in want? The misappropriation of wealth once created is just as wasteful as inefficiency in the process of its manufacture. Equitable distribution of income, therefore, is the fourth test of economy. So we see that prosperity, economic welfare, and economy mean very much the same thing. They are composed of four objectives which constitute the goal of economic progress. To show how these objectives may be attained is the function of applied economics. As we go on with our study we shall see how far we fail fully to attain these objectives in the present economic organization. We shall seek the causes of this failure, and try to find what are the obstacles to their removal. We may then be able to suggest measures by which those obstacles may be overcome and economic progress promoted.

The Main Divisions of Our Study.—In considering the problems suggested by the preceding discussion, we shall find it convenient to group the study into a number of separate divisions. At the outset, we shall survey our industrial system briefly, to see in a broad way what it has

already accomplished toward achieving the desired ends, and how far it has failed to do so. We shall take up also the rôle of the consumer in industry, for it is largely thru consumers' choices that industry is guided into the right or wrong channels. We must then proceed to investigate how industry can be made more productive, first, by organization of the several productive agents into business units of the most efficient type, and by promoting the proper relationships among those agents, and, second, by increasing the effectiveness of the machinery of exchange, which embraces those institutions of marketing, the price system, money, credit, and trade, which occupy so prominent a place in the operations of modern industry. We shall follow this with a consideration of the inequality which exists in society, and some suggestions for securing a wider distribution of the income of society among its members. Since many, if not most, of the measures needed to put a program of increasing economic welfare into effect must come thru the agency of the state, we must add a section devoted to the general relation which government bears to industry. Finally, we need to consider the basic structure of our economic system as a whole, and to contrast it with other systems which have been proposed, in order to determine what general plan or structure is most likely to lead toward the attainment of the goal which we have set up as our final conception of economic welfare. In accordance with this plan, then, this book is divided into the following six parts:

I. An Approach to the Problems of Applied Economics.
II. The Promotion of Efficiency in the Organization and Relationships of the Productive Agents.
III. The Promotion of Efficiency in Exchange.
IV. The Diffusion of Income.
V. Economic Aspects of Government.
VI. Comprehensive Programs of Economic Policy.

Summary

In approaching the study of economic problems a distinction must be made between pure economics, economic ethics, and applied economics. Pure economics describes the industrial system as it is, without reference to its goodness or badness or its fitness to perform the functions for which it exists. Economic ethics sets up standards of economic welfare and tests the fitness of existing economic institutions to perform their functions in the light of those standards, thereby pointing out changes which appear to be desirable. Applied economics utilizes the knowledge of economic principles obtained from pure economics to find means of effecting such changes. It is therefore both ethical and scientific. The point of view of applied economics is a social one; that is, it seeks the welfare of the com-

munity as a whole—the greatest good to the greatest number. Altho general welfare is almost impossible to define, one can set up fairly definite standards of economic welfare. The latter consists of a sufficient income for a comfortable standard of living, composed of those goods which are most beneficial to man, produced in the most efficient way, and widely diffused among the members of society. This concept agrees with the idea of national or social economy.

SUGGESTIONS FOR FURTHER READING

A masterly discussion of the nature and scope of science is Karl Pearson's *The Grammar of Science* (London, 1911), especially Chapter I. An interesting and well-written brief treatment is J. A. Thompson's essay on *Science and Modern Thought,* in Volume 4 of his *The Outline of Science* (1922). For a careful analysis of economic welfare and its relation to general welfare the reader is referred to Part I of A. C. Pigou's *The Economics of Welfare* (3d ed., 1929), especially Chapter I. More readable is W. A. Robson's pleasing little volume, *The Relation of Wealth to Welfare* (1925). An able discussion of the scientific method in economics, and of the relation between pure and applied science in this field, is to be found in J. N. Keynes' *The Scope and Logical Method of Political Economy* (London, 1891), especially Chapter II. Lionel Robbins' *The Nature and Significance of Economic Science* (London, 1932) is a brilliant analysis of its theme. A discussion of the relationship of the economist to public affairs is contained in Oskar Morgenstern's *The Limits of Economics* (London, 1937), which also contains a very complete bibliography. In her delightfully written *Lament for Economics* (1937), Barbara Wootton takes economists to task for their shortcomings and makes a plea for less theoretical analysis and more emphasis on problems of welfare.

A number of writers object to the separation of pure economics from problems of welfare. Representative of this viewpoint are F. A. Fetter's articles, *Price Economics versus Welfare Economics,* in the *American Economic Review,* Vol. 10, pp. 467–487 and 719–737 (September and December, 1920); J. A. Hobson's *Work and Wealth* (1914), especially Chapters I and XXII; and A. B. Wolfe's *Functional Economics,* in R. G. Tugwell's *The Trend of Economics* (1924), pp. 445–482.

Note: The suggested readings appended to the chapters of this book are not intended as a complete bibliography, but merely as a guide to teachers and students who desire to read a little further on the subjects discussed. At the same time, they serve to make acknowledgements, where due, to particular sources from which the authors have obtained valuable material or suggestive ideas in preparing the present volume.

CHAPTER II

ACHIEVEMENT AND FAILURE IN OUR INDUSTRIAL SYSTEM

A. The Productive Achievement of Our Industrial System

The Economic Life of Two Centuries Ago.—If we compare the economic life of today with that of two centuries ago, we find a striking contrast. America, in the early part of the eighteenth century, was in a pioneer state. Its industry consisted mainly of farming, trapping, and the like, carried on by the early settlers and their descendants, who had established homesteads created out of the wilderness by their own hands. They built their own houses, raised their own food, and made their own clothes. Such manufactured goods as were necessary to their simple method of life were imported from England in return for exports of food and raw materials. Each family was an economic unit of itself, which, by the cultivation of its fields and by such household industries as spinning and weaving, provided nearly everything which its members needed for their existence. Obviously, its life was simple, and its wealth was, for the most part, small.

A better illustration of the changes which have taken place, however, can be obtained by picturing to ourselves the economic life of England at this period, for we inherited our economic institutions from that country, and it was there that the significant changes took place which led to the system of industry that now prevails. At the beginning of the eighteenth century, England had not progressed very far from the state of feudalism which had prevailed in the Middle Ages. The masses of the people were agricultural laborers, still carrying on a primitive type of farming on large estates (survivals of the medieval manors) under the dominance of wealthy proprietors, or lords, who constituted part of the British aristocracy. It was primarily a rural nation, about nine-tenths of its people being engaged in agricultural pursuits. The system of agriculture was crude and definitely controlled by custom, which prevented the introduction of individual innovations. Each community was rather isolated, and had very few contacts with the outside world. For the most part, it was economically self-sufficient; that is, its inhabitants produced nearly everything which their simple manner of living required.

Prior to this period some cities and towns had developed, partly as

centers of defense and partly as transportation points for what trade there was. Within these towns industry and commerce were gradually expanding. Two forms of simple manufacture existed. There were *handicraft industries,* such as those of shoemakers, tailors, tinsmiths, goldsmiths, and carpenters, carried on by skilled artisans, consisting of master workmen and their apprentices, who worked with hand tools, without the use of complicated machinery; and there were *domestic industries,* in which employers gave out materials, such as wool, to be woven into cloth by the workers on looms owned and operated by the latter in their own homes.

Since railroads and steamships were non-existent, the highways were little better than quagmires, and banditry or piracy was rife on land or sea, travel and the shipment of goods was hazardous. Hence there was very little trade between different regions. Without trade there was not as much need for money as now, and its use was much less than we are accustomed to. Altogether, the life of this period was narrow, circumscribed by custom and the limitations imposed by ignorance and fixed institutions. The masses of the people, both in towns and in the country, lived in poverty; their houses were little better than huts, their food and clothing of the crudest character, their working hours long, and their recreations few and primitive.

The Economic Life of Today.—It needs no lively imagination to see how different is the situation in countries of Occidental civilization, such as our own, at the present time. Tho agriculture is still our most important single industry, its methods have greatly changed. No longer subservient to landed proprietors, each farmer is free to cultivate his land for what crops he thinks wise, and by the best methods which he knows. There has been much progress in the science of agriculture, so that its technique has been vastly improved, while the introduction of such useful machinery as the reaper and binder, the threshing machine, the tractor, and others of their kind, has greatly lightened the labors and increased the output of the farmer. He lives in a better house than his ancestors; the daily newspaper is delivered to his door; he can enjoy lectures and music over the radio. With good roads and the automobile at his command, he can enjoy more social contacts with his neighbors. There are many problems in connection with agriculture in this country which need to be solved, as we shall see, but notwithstanding them the life of the farmer has been greatly enriched. More significant than these changes in rural industry and life is the growth in importance of manufacturing, with all that that implies. Instead of the handicraft and domestic industry of former days, much of our production is carried on in large factories by the machine process. These factories turn out an amount and diversity of products that were undreamed of two centuries ago. Since the factory system requires the employment of scores, hundreds, or even thousands of

persons under one roof, a large proportion of the people must live in towns or cities of considerable size, where they can be near to their places of employment. Instead of a predominately rural economy, we now have about half of the people of the United States living in urban communities of 8,000 population or more. In some parts of western Europe the proportion is even greater. Large factories can exist only when large markets are accessible for the disposal of their great output. They must sell their goods over a wide territory, readily reached thru efficient means of transportation. These means have been provided, so that we now have an extensive commerce, not only between different cities, but reaching to all parts of the civilized world. Railroads and steamships carry millions of tons of products annually to and from our various states, and into the farthest corners of the earth.

The improvement in our economic life that has accompanied this transformation can be seen in many ways. The masses of our people live in homes better in many respects than those of the aristocracy of long ago. Central furnaces have replaced open fireplaces or dusty and troublesome stoves. Cooking is done on convenient gas or electric ranges instead of the open fire. Where there used to be bare floors or rag carpets and a few bits of rough wooden furniture, we now have soft rugs, colorful draperies and upholstered davenports. A turn of the button illuminates our houses with electric lights instead of the dim light of the old-time candles. We have operas, theaters, motion pictures, athletic contests and a host of amusements which our forefathers did not enjoy. We travel readily by auto or other means to various parts of our own country as well as abroad. Improved means of communication, such as the telephone, telegraph, newspapers and radios, keep us in constant touch with what is going on all over the earth. Modern plumbing and sewage have rid us of the frightfully unsanitary conditions which formerly prevailed, while public health measures, hospitals, and efficient medical service have largely banished the pestilences and plagues which used to sweep whole nations, and have greatly lengthened the average span of human life. In short, we have more freedom, greater variety and more broadening influences—on the whole a richer life—than the world has ever seen before. Tho these things are not shared equally by all of our people, even the working classes enjoy them to a very considerable extent. The whole nation is living at a standard of living far superior to any that has hitherto prevailed, either here or elsewhere.

The Industrial Revolution.—This change is partly to be attributed to a series of remarkable improvements in science and invention which have been going on for nearly two centuries. Beginning in 1764 a number of contrivances were developed in England which soon supplanted the hand methods of weaving then in use in the British woolen industry. Whitney's cotton gin in 1792 performed a similar useful service for the cotton

industry of the United States. These inventions alone would not have sufficed to work a radical transformation in industrial processes and institutions, for the full development of factory methods requires the extensive production of iron and steel for machinery, and some means of power to drive it. These were soon provided by a number of improvements in methods of iron and steel manufacturing, by the invention of the locomotive and the steamship, and by the development of good roads and inland waterways.

It is no exaggeration to describe these changes as a revolution, for they came with startling rapidity, and their result was a violent upsetting of existing economic arrangements. Within less than a century, the old order of industry had been swept away. Factories and great cities sprang up like mushrooms, and the countries of western Europe and America passed from rural agricultural regions to great urban manufacturing nations. Therefore, these changes are commonly referred to as the Industrial Revolution. This is usually thought of as having taken place within a period of about one hundred years, extending from the middle of the eighteenth to the middle of the nineteenth century. Within that period the industrial system, as we know it, became established. In a broader sense, however, the Industrial Revolution is still going on. We are still experiencing a rapid succession of new inventions and processes which are changing the system of industry almost as rapidly as the series of inventions which began in 1764. One need but to mention such marvels as the electric light, the telephone, the telegraph, the radio, the hydro-electric power station, wireless telegraphy, the passenger automobile and automobile truck, the airplane, and a host of other inventions to show the truth of this statement. Chemistry, likewise, is continually yielding new discoveries which transform old industries or give rise to new ones. New processes of treating ores and other discoveries are giving us new products, such as artificial silks and various metal alloys. Methods change as rapidly as machines and products. In a later chapter we shall learn that an entirely new technique of management has been developed which is greatly augmenting the progress of industry. What we are experiencing is a continuous evolution of economic life. We live in a dynamic world.

The Transformation of Economic Institutions.—The transformation which has taken place in our economic life is not due alone to the progress of science and invention. Along with this progress there have been changes in economic institutions which are partly the result of the mechanization of industry, and partly a result of other factors in the general growth of civilization. Let us consider some of these.

We have seen that the early English community and the colonial American farm were economically self-sufficient units. They did not have to depend much upon economic agencies outside of themselves to provide

them with the goods they needed for their maintenance. Today we live in a world of *specialization and exchange.* One man makes shoes or a part of a shoe, another mines coal or helps to mine it, yet another grows wheat, and so on. Each specialist gets most of the things he uses from others thru trade. The shoemaker sells his shoes for money, and with that money buys the coal, wheat, and other goods, produced by other specialists. This means that *money and money substitutes* (such as bank credit) have become almost universal. Nearly every producer sells his goods for money. Our income comes to us in the form of money. Almost everything we use we buy with money. Money institutions and banks occupy a dominant place in our economy.

Growing out of the prevalence of exchange and the use of money there has developed *a system of prices.* Almost every industrial operation culminates in a sale at a price. Prices are all-important to every producer and consumer, for on the price one gets for his product or his services, as well as on the prices which he must pay for what he buys, depends his prosperity. Indeed, prices are so all-pervasive in the modern system that we can accurately describe ours as a price economy.

In early England the position of each individual in industry was more or less governed by custom. People were divided into classes determined by birth, and they were separated by barriers which they could not cross. Even in early America we had slavery. The Industrial Revolution and the American Civil War swept most of this away. We now have a system of *free enterprize* in which people are at liberty to find their own places in industry, so far as their abilities and the opportunities offered by their environment permit. Anyone can establish a business of his own selection, if he has sufficient initiative and ability to do so. Or, he can enter the employment of someone else, choosing his own occupation and helping to fix the terms of his employment. He is free to buy and sell where he pleases, under terms voluntarily agreed upon, so long as he does not transgress the laws set up to prevent dishonest and unfair dealings. We shall find, however, that such laws are being extended in scope, and that governments are coming more and more to restrict the freedom of enterprize of individuals.

Along with free enterprize goes *competition* in industry. When people have freedom to enter such occupations as they please, and to better their status by driving a good bargain, there is opportunity to profit by improvements in methods and plenty of occasion for rivalry among the participants in industry. Since each is governed largely by his own self-interest, and it is to his interest to increase his gain as much as possible, he is brought into conflict with his fellows. We rely tacitly on competition to secure economy in the production of goods and fair prices in their sale, yet here, again, there is increasing dependence on government supervision.

In the simpler economy of two centuries ago there was little *private property* of importance other than land, inexpensive houses, and a few tools. The Industrial Revolution created important new forms of tangible wealth, such as factory buildings, railways, machinery, and industrial equipment, as well as new and more durable forms of consumers' goods, such as more substantial houses, furnishings, and automobiles. A more striking change in property institutions, however, has been the growth of intangible property rights, such as stocks and bonds. These have become widespread in modern society and have greatly changed the character of the institution of property. They have facilitated the financing of the large industrial plants necessary to carry on modern industry by permitting hundreds of thousands of people to pool their savings into one investment; but this, too, has brought its problems, as we shall see.

Finally, the modern system of industry has brought with it the much more universal payment of *money wages*. The worker no longer receives the actual products which he makes, or even a part of them. Instead, he is recompensed for his labor by the payment of a money wage. Thus the Industrial Revolution has divided the participants of industry into two groups, an owning, employing class, who possess or control the capital necessary for production, and who direct the enterprizes of which they are the heads, and a working, wage-earning class, consisting of laborers who perform the detailed operations of industry under the supervision of their employers. This gives to the employers an opportunity for profits which has undoubtedly stimulated the development of industry, but which, again, brings problems which we must consider as we go on.

The economic institutions which have just been described constitute the basic features of our industrial system. It is this system, with these institutions, that we ordinarily have in mind when we speak of *capitalism*, in its broadest sense.[1] The Industrial Revolution brought capitalism into being. The real problem of this book is to study the institutions of capitalism, to see how well they are working, and what defects exist which need to be corrected. In this chapter, we are merely trying to get a bird's-eye view of these problems.

The Growth of Production.—We have already seen, from the contrast drawn in the first two sections of this chapter, that capitalism has wrought remarkable achievements in certain respects. The principal achievement is a tremendous increase in production. It is because of the much larger output of industry under the industrial system that we are able to enjoy the benefits already described.

The simple comparison which we have made of the economic life

[1] *Capitalism* may be more narrowly construed as consisting of the system of free enterprize, competition and private property, as distinguished from *socialism*, which would do away with these features. See Chapters XXV, XXVII and XXVIII.

of today with that of two centuries ago makes this increase in production obvious, without the necessity of proving it by scientific measurement. Moreover, much of the change that has taken place is of a character which is not susceptible of measurement. How can we hope to measure the economic improvement involved in such things as the change from crude, homespun clothes to the finely woven garments of modern times, from the horse and carriage to the automobile, from unpainted wooden tables and stools to the upholstered furniture of twentieth century homes, from the ignorant, plodding life of the rural peasant to the teeming, interesting activities of the people of today? These are changes in *kind* of products which defy the measuring rod of the scientist.

To some extent, however, the growth of production can be measured in quantitative terms. In so far as growth consists of mere increase in the number of bushels of wheat raised, or tons of iron produced, and the like, it is possible to measure it. In recent years statisticians have learned how to calculate such changes and to express them in terms of a general average so that statistical measurements of production are available for a period covering almost the last hundred years. It may be worth our while to survey these figures briefly.

The Income of the United States.—The total product which emerges from the operations of industry constitutes the income of society. Students of economics are familiar with the fact that, altho we are accustomed to think of income as receipts of money, this money is only a claim upon economic goods. Real income consists of the things we buy with the money we receive. Since most of what is produced is sold for money, and the money paid to people who spend it for goods, the sum of money receipts is approximately equal to the money value of the goods produced. This suggests that we can measure the income or production of a nation in money terms. There are two ways in which we may go about it. We may ascertain the total money receipts of the people of the nation or group during a given period of time by studying such statistics as are afforded by income-tax returns submitted to the government by its citizens each year, supplemented by estimates of wages paid in our industries, as shown by payroll sheets, trade-union and other records. Or, we may compute the money value of all the goods produced, by assembling data concerning the value of crops harvested, minerals mined, products manufactured, and services performed during the period of time covered by the study. If our accounting is correctly done, and due allowances are made for such things as duplication of items in the data, income received in goods instead of in money, and imports and exports of merchandize, the two totals should agree. Each would, therefore, provide a check upon the other. We need not concern ourselves in detail with the statistical technique which would have to be followed in securing reasonable accuracy by such methods. We are only interested in the figures statisticians have succeeded in obtaining in this way.

They provide a quantitative test of what success our industrial system has had in causing our income to grow.

In the table below are given figures showing the growth of income in this country from 1850 to 1910 by decades.[2] These figures are not as accurate as those for later years, but they present a fairly trustworthy picture of the general growth of our income following the events of the Industrial Revolution. For the present century much more reliable data are available. Table II gives the data for the years 1911 to 1934.[3]

TABLE I

THE ESTIMATED INCOME OF THE PEOPLE OF THE CONTINENTAL UNITED STATES

Census Year	*Total Money Income (in Millions of Dollars)*	*Per Capita Income (in Current Dollars)*	*Per Capita Income (in Dollars) at Average Prices of 1890–1899*
1850	2,214	95	69
1860	3,636	116	82
1870	6,720	174	79
1880	7,391	147	111
1890	12,082	192	169
1900	17,965	236	232
1910	30,530	332	262

As the figures in these tables are given in terms of money values, part of the changes shown in terms of current dollars (that is, at the prices prevailing in the successive years) merely reflects changes in the general level of prices. These figures are not, therefore, correct measures of real income. The last column of Table I and the fourth and fifth columns of Table II, however, correct these figures by the use of an index of prices,[4] so that they show the money values of our incomes in terms of the price levels of 1890–1899 in the first case, and of the price level of 1926 in the second. That is, these columns show the change in the money value of our output as it would have been had the price level remained stable. Such an increase could have been due only to a change in the actual output of goods. It is these last columns, therefore, which measure the actual changes in real income. Perhaps an illustration will help to make this more clear. In Table II the money value of the income of the

[2] W. I. King, *The Wealth and Income of the People of the United States, 1850–1910* (1915), p. 129.

[3] The figures are for the net value of goods produced by the nation's gainful workers, and are taken from a number of sources, adjusted in some instances to preserve continuity of concept. Figures for 1924–1928, 1933 and 1934 are estimates of the National Industrial Conference Board. The 1929–1932 figures are from the United States Department of Commerce Report, *National Income, 1929–1932,* while those for 1918–1923 are from the Federal Trade Commission's report, *National Wealth and Income.* The 1935–1936 figures are based on estimates from the United States Department of Commerce's *Survey of Current Business,* June, 1937. Dr. W. I. King's estimates provide the basis for the 1911–1917 figures.

[4] For a fuller explanation of such indexes and their significance see the first paragraph of Chapter XV.

TABLE II

THE INCOME OF THE CONTINENTAL UNITED STATES

(1911–1936)

Year	*Income in Current Dollars*		*Income in 1926 Dollars*	
	Total (in Billions)	*Per Capita*	*Total (in Billions)*	*Per Capita*
1911	29.4	314	45.3	484
1912	31.8	334	46.0	483
1913	33.7	350	48.3	501
1914	32.0	327	47.0	470
1915	34.5	347	49.6	499
1916	44.2	439	51.7	513
1917	53.2	521	45.3	443
1918	60.2	581	45.8	442
1919	67.4	642	48.6	463
1920	74.3	697	48.1	451
1921	52.6	486	53.9	498
1922	61.7	562	63.8	581
1923	69.8	626	69.4	638
1924	69.6	615	70.9	627
1925	77.1	671	74.5	648
1926	78.5	674	78.5	674
1927	77.2	653	80.9	684
1928	80.5	671	83.2	694
1929	83.0	683	87.1	717
1930	70.3	571	81.4	661
1931	54.6	440	74.8	603
1932	39.4	315	60.8	486
1933	41.8	333	63.4	505
1934	47.6	377	63.6	503
1935	54.9	431	68.6	538
1936	63.8	497	79.1	616

United States in the year 1920 was $74,300,000,000 as compared with $67,400,000,000 in 1919. This appears to indicate an increase of $6,900,000,000 in one year. It happens, however, that prices in 1920 were considerably higher than in the year preceding, more than enough higher to account for all of the increase. When the figures are corrected to allow for this fact, it appears that the real income was actually less in 1920, as the figures in the fourth column show.

From the corrected figures it appears that we increased our production at a phenomenal rate until the 1929 peak was reached. From 1930 to 1932 production declined sharply, but it began moving upward again in 1933. Statistics thus confirm our general observation that the industrial system in which we live has brought about a decided improvement in production.

An Index of Physical Production.—It is also possible to measure the physical production of industry directly, by means of index numbers constructed somewhat as follows: If we take the volume of railroad traffic, the output of coal and iron, the amount of agricultural production, and other indicative items in a certain year, and compare them with the same items in some other year which has been selected as a base, we can show the percentage of increase or decrease in the physical volume of production that has taken place. For instance, if we take the year 1913 as the base, we might find that the number of bushels of wheat harvested in this country in 1915 was 10 per cent greater than in that year. We could then express the production of that commodity in 1915 as 110 in relation to that of the base year. If we do this for a representative list of commodities and services, and then take an average of them all, it will give us a figure representing the physical volume of production in 1915 as compared with that of 1913. One such index, based on statistics for 91 basic commodities in the United States, is reproduced in Table III. It shows that the output of our industries was almost trebled in the period from 1890 to 1918.

TABLE III

STEWART'S INDEX OF THE PHYSICAL VOLUME OF PRODUCTION [5]

(Derived from 91 commodities — Average for 1911–1913 = 100)

Year	*Index*	*Year*	*Index*	*Year*	*Index*
1890	45	1900	66	1910	96
1891	54	1901	67	1911	93
1892	50	1902	77	1912	106
1893	49	1903	75	1913	101
1894	48	1904	80	1914	101
1895	57	1905	86	1915	112
1896	57	1906	91	1916	117
1897	62	1907	89	1917	124
1898	66	1908	84	1918	125
1899	65	1909	94	1919	120

A more recent study (Table IV) shows a moderate decline (presumably temporary) during the depression period from 1929 to 1934:

TABLE IV

BLISS' INDEX OF THE PHYSICAL VOLUME OF PRODUCTION[6]

(1927 = 100)

Year	*Index*	*Year*	*Index*
1927	100	1931	87
1928	106	1932	71
1929	110	1933	75
1930	98	1934	78

[5] *American Economic Review,* Vol. XI, pp. 57–70, March 1921.

[6] C. A. Bliss, *Production in Depression and Recovery,* National Bureau of Economic Research, *Bulletin* 58, November 15, 1935.

The Growth of Wealth.—We can further measure the success of our capitalistic system by surveying the increase in our wealth, for the possession of wealth is at once the evidence of surplus products created in the past and a means of production for the future. Durable wealth either takes the form of consumers' capital, such as houses and furnishings, or industrial plant and equipment, such as factories, railroads, highways, machinery and the like—all of which contribute to our income in the future. There is also some wealth of a less permanent character. The United States Bureau of the Census estimates of our national wealth from 1850 to 1912 are given in Table V:

TABLE V

ESTIMATED NATIONAL WEALTH OF THE UNITED STATES
1850 — 1912

Year	*Total* (In billions of dollars)	*Per Capita* (Dollars)
1850	7.1	308
1860	16.1	514
1870	24.0	624
1880	43.6	870
1890	65.0	1,036
1900	88.5	1,165
1912	186.3	1,950

Unfortunately, this is not a measure of physical wealth, for it is in terms of current dollars not corrected for price changes. We cannot tell how much of the increase there shown is due to rising land values and other price increases. Professor W. I. King, however, comes to our rescue once more. He has taken that part of the Census estimates which consists of fixed instrumental capital, and has corrected it for price changes. Here are the resulting figures:

TABLE VI

FIXED INSTRUMENTAL CAPITAL IN THE CONTINENTAL UNITED STATES [7]
(Corrected for price changes — 1890–1899 = 100)

Year	*Quantity of Capital Per Capita*
1850	$ 85
1860	133
1870	105
1880	205
1890	270
1900	321
1910	412

This shows us that the material equipment of industry was increased nearly five-fold in a sixty year period. For more recent years we have data on the

[7] W. I. King, *The Wealth and Income of the People of the U. S., etc.*, p. 44.

total wealth of our country corrected for price changes in the manner above explained for income figures (Table VII). If we examine the corrected figures in the third column of the table, we find that a very remarkable increase of our national wealth was still going on prior to the Great Depression, amounting to about 41 per cent in the 18 years from 1912 to 1930.

TABLE VII

ESTIMATES OF NATIONAL WEALTH 1912–1930 [8]
(In billions of dollars)

Year	*National Wealth in Current Dollars*	*National Wealth in 1913 Dollars*
1912	183.0	184.8
1913	189.1	189.1
1914	188.6	193.3
1915	196.7	197.5
1916	247.2	201.8
1917	346.8	206.0
1918	395.5	210.2
1919	425.9	214.5
1920	483.8	218.7
1921	311.7	222.9
1922	314.7	227.2
1923	333.5	231.4
1924	331.2	235.6
1925	355.7	239.9
1926	349.7	244.1
1927	339.4	248.3
1928	353.5	252.6
1929	355.0	256.8
1930	322.7	261.0
1931	358.7	261.8
1932	355.1	230.6
1933	353.2	232.4
1934	351.9	263.6

The New Basis of Civilization.—The increase of production pictured in the foregoing paragraphs is *the* great achievement of capitalism. The late Professor Patten suggested that thru this progress we are paving the way for the real happiness of the human race. We are passing, he declared, from a state of deficit into one of surplus. By this he meant that man formerly lived in what he called a "pain economy," in which the rigors of existence were so severe, and the presence of economic want so imminent, that most of men's energies were necessarily turned toward the physical needs

[8] Data from 1912 to 1930 from *National Industrial Conference Board*. Later data from L. Kuvin, *Private Long-Term Debt and Interest in the United States* (1936), p. 58. Figures do not include the value of ships of the United States navy, privately owned water supply systems, or gold and silver coin and bullion.

of life. So long as scarcity of economic goods dominated the world, there was conflict among men which brought out their baser instincts and produced the sterner forms of competition and warfare. Only a fortunate few could enjoy the leisure necessary for the cultivation of the beautiful and ennobling things of life. Even the art and culture of the Greeks was that of an aristocratic class, supported in luxury by the exploited masses, who lived in a state of virtual slavery. But now that technical progress has increased so bountifully the means of existence, we live in a "pleasure economy," where men's energies need no longer be devoted primarily to their mere material wants. If we can increase the economic surplus still further, and bring about its wider diffusion among the masses, all may have enough leisure and wealth to turn their attention to the development of health, beauty and character in every aspect of their lives. Poverty can be abolished and there need be less clash of classes and nations. So civilization rests upon a new basis of surplus which changes its whole aspect. By providing this new basis, economic progress paves the way for the general progress of humanity.

B. The Failures of Our Industrial System

Capitalism is not Wholly a Success.—In spite of the progress shown by the industrial changes which were described in Part A of this Chapter, we cannot view our industrial system with perfect complacency. It still has many defects which need to be remedied. In Chapter I we laïd down certain standards which we regarded as the tests of economic welfare. To meet these tests fully: (1) we must produce only the most desirable kinds of goods, as judged by the ideals of our most enlightened thinkers; (2) we must produce these goods abundantly, which requires that (3) we must produce them according to the highest standards of efficiency that the existing state of the arts permits; when we have done all these things, (4) we must see that the resulting income is widely diffused among the masses of our people. Our analysis up to this point tends to show that the greatest virtue of capitalism lies in the second and third points of our program. We are producing goods in greater abundance than ever before, and this has been due to the improvement in the efficiency of production. Yet we shall find that we still fall far short of the possibilities for production offered by modern science, invention, and business technique; and we fall still further short in meeting the first and fourth of our tests. We certainly do not produce only the most beneficial kinds of goods, and the abundance of income that we do have is not nearly so widely shared by the masses as it should be. Thruout this volume a more detailed consideration will be given to these problems. Hence, in the rest of this chapter, we need only survey briefly the defects of our industrial organization to obtain a general idea of its weaknesses.

Malproduction.—Unfortunately, a large amount of our productive energy is devoted to creating goods which contribute little or nothing to genuine welfare. Such activity may appropriately be called *malproduction*. Some of this includes the making of goods not really harmful to men, but which contribute little towards genuinely good standards of living. There are such non-essentials as chewing gum, cosmetics, flimsy merchandize, and gewgaws of a hundred different kinds. To these we may add those super-luxuries which are produced only to cater to the whims of the rich—the Rolls Royces, private yachts, expensive jewels and so on, whose cost far exceeds anything of real utility which they contribute to the social well-being. When we think of the labor and materials that go into the production of these things, we can realize that this is economic waste. It is not sound economy to be dissipating our materials and labor power in articles of such a nature when there are so many good things which we do not yet have in sufficient quantities. Not only are we producing non-essentials, but we are also turning out large quantities of things which are positively injurious. These include narcotic drugs, intoxicating liquors, noxious patent medicines, and various other commodities. Along with these there is involved the wasted time of lawyers, corrupt politicians and their kind who are busy keeping out of trouble the people who are engaged in these activities. Let us add the suffering and disease that result from vice, crime and similar nefarious doings. If we could release the labor and capital devoted to all this malproduction for truly uplifting things, it would add enormously to our welfare. We shall consider this problem in some detail in the next chapter.

Incomplete Utilization of Capital and Labor.—The increased productivity of our industrial system, as we have described it, has taken place in spite of our failure to realize to the fullest the possible productive capacity at our disposal. The very system of competitive industry which releases individual initiative at the same time makes for unnecessary duplication of plant and equipment. Each competing enterprizer, in striving for a maximum share of the business in the market, employs as much labor and capital as he thinks he can utilize, until there is a multiplicity of small establishments, where often one well-managed, large, efficient concern could do the same work with a smaller total investment. Thus we find two railroads running side by side serving the same territory, several grocery stores in the same neighborhood where one would be adequate, and so on. Similarly, we may sometimes find too many stages between primary producers and ultimate consumers, making for expensive marketing costs. The result of all this duplication is that effort and capital that might be utilized in producing something valuable are wasted in unproductive equipment.

There is much idleness of labor. In the United States some 40 to 50 million persons are normally available for employment in some gainful

occupation, yet very few of these are steadily at work every day of the year, year in and year out. There is considerable—sometimes a terrific—loss of time due to involuntary unemployment. Some of this is due to labor disputes which lead to strikes and lockouts. Some people are idle merely because they are continually changing jobs in consequence of poor employment policies or discontent on their part. Others are laid off because of seasonal fluctuations in industry. More serious than any of these is the enormous volume of unemployment that takes place during those recurrent breakdowns of industry such as we passed thru during the years 1930–1933. As a result of all these causes we have always from one to ten million or more workers unemployed. This does not include that numerous class of people who are voluntarily idle. We have these at both ends of the social ladder. There are hobos and bums who work intermittently or not at all, degenerates who are incapable of steady work, and the wealthy leisure class who prefer to spend their lives in ease, frivolity, and extravagance. All of these groups are parasites who must be supported by the labor of others. This is sheer waste, much of which is preventable. A more perfectly organized system of industry would keep these people at work producing things that would add to our prosperity.

Inefficient Production Methods in Individual Plants.—With the scientific knowledge and mechanical devices which are now at our disposal, we might expect each individual enterprize to be operated at a high level of efficiency. Experts in industrial management tell us, however, that there are many avoidable wastes to be found in the average establishment. Defective or obsolete machines, tools, and buildings are widely used. There is great waste of materials caused by such things as the faulty cutting of leather in shoe establishments, failure to utilize by-products, and spoilage of materials on hand thru improper care. There is lack of coördination among the different departments of a business, so that one is held up while waiting for another to supply it with needed parts or materials. Improper sales policies cause capital to be tied up in products that are not disposed of quickly enough, or which may have to be sold at a loss due to deterioration or their becoming out of date. Poor handling of men leads to bad workmanship, expensive changes in personnel, and general inefficiency of labor. Lack of adequate records and accounts, as well as failure to keep up with the developments of research, are other factors making for poor business methods.

In a system of competition and free enterprize there is a great diversity of products and processes. This results in lack of standardization which makes for waste. This is well illustrated by our railroad history. When each railroad company had tracks of a different gauge, frequent transfers of freight were necessary at each point of junction between two lines. We have eliminated this by a standard gauge track which permits thru-routing of cars all over the country; but there are hundreds of instances in industry

where such uniformity has not been attained. Consider the diversity of automobile models. This necessitates an unnecessarily large number of dies, machines, spare parts, etc. It is estimated that standardizing all newspaper columns to one size would save from three to five million dollars on press composition and the manufacture of plates alone. Recently much progress has been made in the standardization and simplification of industrial products and processes, but much more of this work is needed. The economies possible by this means would in themselves bring about an enormous increase in our national income.

The Malfunctioning of Money and Credit Institutions.—We have seen that the use of money and credit has greatly facilitated the processes of specialization and exchange which are partly responsible for the growth in production. Nevertheless, we shall find that present monetary and banking policies are working far from satisfactorily. Because of this, prices move up and down in an erratic way which is very disturbing to business, and they play an important part in causing the disastrous depressions which paralyze industrial activity from time to time. There is urgent need for improvement in our monetary institutions.

The Extent of Waste.—Some years ago Mr. Stuart Chase, a popular and rather well-informed writer, wrote a most entertaining book called *The Tragedy of Waste,* in which he gave a vivid and dramatic description of the wastes which we have enumerated, and many more. He attempted to estimate the amount of our working capacity that was squandered or unused in this country. The figures which he arrived at are as follows:[9]

Man-power devoted to malproduction	8,000,000
Man-power idle on a given working day	6,000,000
Man-power wasted in faulty production	6,500,000
Total	20,500,000

When we consider that there were only some 45 million persons available for employment at the time he wrote, this is a staggering figure. Mr. Chase's propagandistic zeal may have led him to exaggerate, but the amount of waste which takes place in the ways that have been described is unquestionably enormous.

A more cautious study of waste in individual plants was made in 1921 by a group of experts called The Committee on Elimination of Waste in Industry of the Federated American Engineering Societies, under the chairmanship of Mr. Herbert Hoover. It studied the wastes in six basic industries —building, textiles, men's clothing, printing, boot and shoe manufacturing, and the metal trades. Taking the performance of the best plants as a standard by which to judge the others, they divided the possible wastes into four

[9] Stuart Chase, *The Tragedy of Waste* (1925), p. 270.

categories, weighted according to their importance. Trained engineers were then sent to various plants, and points were assayed against them for each element of waste found. These experts discovered that there was a wide range of difference in the degree of efficiency in the various plants that they investigated. This is shown in the following table which sums up their findings:[10]

Industry	*Ratio of Waste Assayed Between the Best Plant Studied and the Average of All Plants*
Men's Clothing Manufacturing	1 : 2
Building	1 : 1½
Printing	1 : 2
Boot and Shoe Manufacturing	1 : 3
Metal Trades	1 : 4½
Textile Manufacturing	1 : 1½

This means that there is from one and one-half to four and one-half times as much waste in the average industrial plant as the best standards now prevailing in industry permit.

The Responsibility for Waste.—The Committee went further and attempted to find out what or who was responsible for these wastes. It concluded, "over 50% of the responsibility for these wastes can be placed at the door of management, and less than 25% at the door of labor, while the amount chargeable to outside contacts is least of all." It is to be noted that this study puts the problem of waste primarily up to the management of industrial enterprizes. Undoubtedly management is an important factor, and if all of our business establishments could be brought up to the standards of performance already attained by the leaders, there would be a tremendous gain. However, we must remember that these experts were investigating conditions within individual businesses where management is peculiarly in control. The broader survey of our industrial system which we are undertaking reveals sources of waste in the industrial system at large that would not be so apparent to the engineers. Even they found that part of the fault was due to labor, which by its restrictive policies retards production, and that part was due to general features of the industrial situation over which enterprizers have no control. They should have added consumers, whose ignorance, indifference and folly permits the production of non-essential and harmful goods, as we have seen. But, above all, we must recognize that the system of competition and free enterprize lends itself to all of these deficiencies. It permits inefficient men to set up business establishments. It permits considerable freedom in deciding the policies each should pursue in relation to industry. It permits consumers to guide pro-

[10] Committee on Elimination of Waste in Industry of the Federated American Engineering Societies, *Waste in Industry* (1921), p. 10.

duction by their whims instead of by more trustworthy standards of social welfare. It is the system, therefore, which we must study. We must modify economic institutions in such a way that waste will be reduced and further progress will be promoted.

The Waste of Natural Resources.—There is one other type of waste which we have not considered. It is important to remember that we are dependent on our natural resources for the creation of all wealth. Without them labor, science and all of our technique would be fruitless. It is, therefore, important that these resources be used as efficiently as possible. We may divide natural resources into two classes: those which are renewable, such as lumber, fish, water power, and land fertility, and those which are not renewable, such as coal, oil, natural gas, and the various metals. Wise policy dictates that the renewable resources be replaced as fast as they are used, and that the non-renewable ones be employed as economically as possible. America began as a nation whose resources were extremely rich and plentiful, while labor was scarce and costly. The result was that we economized our labor power by exploiting our natural resources in the most reckless and extravagant way. This is still largely true. Our natural resources are in the hands of individuals who look for immediate personal profit regardless of the ultimate cost to society. Hence many valuable resources are irretrievably lost. Forests have been ruthlessly destroyed. The richest coal veins have been gutted, leaving much other coal irrecoverable under the soil. Fuel is burned in such a manner that we utilize only a small part of its heat and allow the by-products to go up in smoke. When an oil pool is struck everyone begins drilling until many times the number of wells needed have been constructed, and the resulting loss of gas reduces the pressure underground until the oil will no longer flow without costly pumping. As a consequence, fields are abandoned with large quantities of oil still in the ground. When we add to these the inadequate use of water power, the reduction of land fertility by soil erosion, the exhaustion of our fish supply, etc., it can be realized that the waste involved must be tremendous. Future generations must pay the price. It is high time that we began to conserve our resources for the sake of the future prosperity of our nation.

The Prevalence of Inequality.—Let us now look for a moment at our fourth test of economic welfare, which, we said, requires the wide diffusion of income. It is true that the masses of our people have shared partly in the benefits of our increased production. Yet we have in society today a striking contrast between riches and poverty. On the one hand are multimillionaires whose vast wealth enables them to live in incredible luxury and extravagance, with numerous automobiles, lackeyed servants, palatial residences, costly furnishings and everything else that money can buy. On the other hand we have thousands of people in poverty, housed in

crowded, flimsy homes, poorly clothed, undernourished, unable to pay for adequate medical attention and living in a state of misery and want. The presence of poverty in spite of progress is one of the great paradoxes of our civilization. Hundreds of philosophers have devoted their thought to this problem, and many remedies have been proposed, but still the contrast persists. It is evident that our income is not as widely diffused as it might be. Here is another defect in our industrial system which we must analyze.

Capitalism on Trial.—Altho the capitalistic system of industry has brought many improvements over the economic system which preceded it, its failures, as they have just been outlined, lead many people to wonder whether it, too, must not sooner or later give way to another system that will make for still greater progress. We must remember that life is a process of evolution, and that economic institutions as well as other things must change as time goes on. Capitalism itself is ever-changing, so that it is not the same as it was even fifty years ago. What is to be the ultimate outcome of its evolution, and what form of economic organization does it lead to? Must it give way to a new order such as socialism or communism, or will it retain its essential outlines with minor modifications? We must defer these questions until the closing chapters of this volume. In the meantime we shall consider one by one the points of weakness which reveal defects in the present system of economic organization, and see what measures may be taken to correct them without completely overthrowing existing institutions, or without drastic revolution. We shall then be in a better position to judge our industrial system as a whole, and to point the way towards future progress.

Summary

A comparison of the economic life of today with that of two centuries ago shows a striking improvement in the material welfare of the people. This progress came about thru the technical inventions of the Industrial Revolution and the accompanying growth of such economic institutions as specialization and exchange, the use of money and credit, the price system, free enterprize, competition, private property of both tangible and intangible sorts, money wages, and the employer-employee relationship. These constitute the basic features of capitalism. Under this system production has made a remarkable growth, as indicated by the increase of income and wealth shown by statistics. Civilization is on a new basis of surplus which gives opportunity for lives of greater leisure, wealth, and enjoyment.

On the other hand, our industrial system shows numerous failures. We produce many goods of non-essential or deleterious character (malproduction). Much inefficiency is revealed in the industrial methods of individual plants. These lead to a tremendous amount of waste. This waste is due partly to management, partly to labor, but in even greater measure to the

institutions of competition and free enterprize. Two other failures of our industrial system lie in the reckless waste of our natural resources and in the extreme inequality of incomes which continues to prevail in spite of progress. These defects of capitalism raise the question whether it will eventually be superseded by some other form of economic organization.

SUGGESTIONS FOR FURTHER READING

Hartley Withers gives a popular, tho somewhat superficial, treatment of many of the topics discussed in this Chapter in his *The Case for Capitalism* (1920), especially Chapters II, VI, and XI. Arnold Toynbee's *Lectures on the Industrial Revolution* (10th edition, 1894) is a standard classic on the transformations of the eighteenth and nineteenth centuries. Statistical studies showing the growth of income and wealth in recent years are to be found in W. I. King's *The Wealth and Income of the People of the United States* (1915), and in the income studies of the National Bureau of Economic Research, including W. I. King's *The National Income and Its Purchasing Power* (1930). The latest available income material is to be found in Simon Kuznets, *National Income and Capital Formation, 1919–1935* (1937), and in the recent studies of the Department of Commerce, including *National Income in the United States, 1929–1935* (1936) and *National Income, 1929–1936* (1937).

S. N. Patten's *The New Basis of Civilization* (1907) is a very stimulating book, painting an optimistic picture of the possibilities for welfare created by our economic surplus. Stuart Chase gives a challenging revelation of the wastes now prevailing in industry in *The Tragedy of Waste* (1925). A more technical treatment of this subject is contained in *Waste in Industry* (1921), being a report of the Committee on Elimination of Waste of the Federated American Engineering Societies. An able attack on the system of capitalism, with emphasis on the wastes of commercial as contrasted with what the author calls "productive" activity, is presented by Sidney A. Reeve in *Modern Economic Tendencies* (1921).

CHAPTER III

CONSUMPTION AND THE GUIDANCE OF INDUSTRY

A. The Function of Consumption and the Obstacles to Its Fulfillment

The Guidance of Production by Consumers.—In our system of economic organization, consumers play an important part in controlling the direction which production shall take. They do this by the choices they make in spending their incomes. For the most part, no one dictates to the consumer what he shall buy. Within the limits set by his income, his knowledge, and what can be produced, he may purchase what he prefers. In choosing to spend this way or that he adds to the demand for the commodities of his choice. This demand registers itself in the markets where goods are bought and sold, taking the form of price offers. Since prices are determined by the demand and supply of the commodities available, those things for which consumers express the greatest demands come to have high prices, relative to the productive means necessary to produce them. These high prices encourage the industries concerned, and cause production therein to expand. In this way production is guided, automatically as it were, by consumption. Presently we shall see that the producer may influence the consumer to some extent by means of advertizing and clever salesmanship; but this does not destroy the fundamental truth of the proposition just stated.

If consumers were all-wise, knowing what is best for them, knowing the real utility of all the commodities offered in the markets, and possessed of the strength of will to resist the allurements of gaudy claptrap and undesirable merchandize, this guidance of production by consumers' choices would be in harmony with the principle of economy with which the reader is now familiar.[1] Unfortunately, this condition of human per-

[1] That is, so far as each individual is concerned, his income would be spent in the most economical way. But the fact that consumers have unequal incomes would stand in the way of perfect economy from the social point of view. The rich cause producers to attend to some of their trifling wants while ignoring the more important needs of the poor. For example, the demand of the rich for silken portières to decorate their homes may cause much labor and capital to be devoted to their production, while the poor, lacking sufficient means to influence the market, may be denied sufficient clothing to protect them in winter. From the social point of view this is a waste of productive resources. This, however, is not a defect of consumption as such; it is a defect of the distribution of income. Further discussion of it, therefore, will be deferred to a later point in this volume. See Chapters XX–XXII.

fection has not yet been attained. To the extent that consumers fail to live up to it, there is opportunity for waste in consumption. If we spend unwisely, buying foolish things, we cause the wrong things to be produced, and thereby cause valuable productive power to go for naught. Consumption thus stands at the head of our whole economic system, guiding and controlling it for good or for ill. In so far as consumption is misdirected, the whole productive process is distorted and led astray. It is important, therefore, to consider what are some of the obstacles to correct standards of consumption and what measures are possible for their removal.

The Ignorance of the Consumer.—The average human being, even in so enlightened a nation as the United States, is still far from having the wisdom necessary to utilize his income in the manner most conducive to his welfare. Intelligence tests, formulated by psychologists and applied to large sections of our population, particularly to the soldiers drafted for our army during the World War, show that the level of native mental ability among a large percentage of our people is still surprizingly low. In spite of the system of universal education which prevails in this country, most of our pupils never go thru high school, much less thru college or university, so that they do not even develop to the fullest what intellectual capacity they have. Oftentimes, also, people who know what is good for them do not choose to act upon that knowledge. It seems so much easier to disregard the laws of health or the laws of morality. The result of this ignorance and weakness is a great deal of unwise consumption. People spend their incomes frivolously, carelessly, injuriously. Social workers tell us that, in the homes of the poor, housewives are very inefficient in their direction of the family budget, purchasing foods of little nutritive value in proportion to the money they spend. In the homes of the rich, particularly of the newly rich, there is similar waste, in expenditures for flimsy show and the buying of articles of bad taste in place of those of lasting value and beauty. Then there is dissipation in its various forms—the purchase of intoxicants and narcotics, the patronizing of gambling dens and houses of ill-fame, and so on. All these things are sources of waste in consumption.

Lack of Standardization of Consumers' Goods.—One reason why the consumer does not always spend as wisely as he might is because he has no adequate means of knowing the quality and utility of the commodities which are offered to him in the market. There is a woeful lack of standards by which consumers' goods can be judged. Suppose one is desirous of purchasing a pair of shoes. He sees in the shop windows of different stores a number of pairs at different prices. How is he to tell what is the best value for his money? Two pairs of shoes may look alike. One may be all leather, well made and of sound construction thruout, the other poorly sewed and containing a great deal of paper, yet superficially so cleverly

finished that the defects are not visible. No one but an expert could tell the difference. One goes to the market to buy some tomatoes. How is he to tell how much he is getting for his money when different sized containers are used; when, of two baskets apparently of half-bushel size, one is so constricted in the middle as to reduce its capacity by as much as ten or even twenty per cent without the shortage being noticeable to the eye? One goes to the clothier's to buy a suit. How is he to know whether it is all wool, as the salesman assures him it is, or whether it contains a considerable portion of cotton, as is very often the case? There are many methods of adulteration, short weight, faking, and other forms of deception, by which producers can take advantage of consumers. It is impossible for the consumer to have the detailed expert knowledge necessary to appraise properly the great variety of things which he must buy; nor has he the equipment or facilities to make the tests required. In this respect the consumer-buyer is at a decided handicap as compared with the business man buying materials for use in his own manufacturing process. If a miller wants to buy wheat, the market organization has been so perfected that wheat is standardized into various grades, and he may order number one wheat without ever seeing it and yet knowing exactly the quality of the grain that will be delivered to him. Even where such standardization has not been worked out, the business man is at least sufficiently expert in his own field to judge of the quality of what he gets, and he is seldom deceived. But the ultimate consumer is not in a position to make such judgments, and, in the absence of any public authority or consumers' organization to set up adequate standards of merchandize and of measurement, he is often the victim of unscrupulous dealers or of his own ignorance. These obstacles prevent the consumer from exercizing effectively the rôle of guiding production into the channels that contribute most to his needs.

The Irrational Character of Standards of Living.—Consumption is not altogether an individual matter. Most of the things which we buy are prescribed for us by the group customs and practices under which we have been brought up. We have acquired thru our family life, our friends, our education, and our contacts with people generally, certain notions as to how it is appropriate and fitting to live. We come to adopt certain standards of living as a matter of habit without particular thought or the exercize of personal judgment. These standards of living are socially established and imposed upon us. Altho there is much room for individual discretion in the details of consumption, its general outlines are established by the social environment with which we are surrounded. The kind of clothing we wear, the food we eat and the way it is cooked, the type of homes we live in and their furnishings, our forms of recreation, are all accepted by us unthinkingly from the established customs of our society. There is no reason to believe that these standards of living are based upon any rational considera-

tion of our real needs. In fact they are often quite the reverse. The style of women's dress, for instance, may prescribe a slender and willowy figure which results in garments that deform the body and impair the health of present as well as future generations. The standards prevailing in one's social circle may prescribe that he take his recreation in late night parties, depriving him of proper rest and sleep. Yet he accepts this standard because it is in vogue among the people with whom he associates. It is the fashion in America to live in homes heated in winter several degrees above the level which physicians tell us is best for our health. These examples are typical of thousands of current practices which affect our consumption and make for waste in it.

Some writers have advanced the optimistic doctrine that standards of living are subject to a process of natural selection which makes the good qualities survive and the bad ones perish, just as the fittest are given the victory over the weakest forms of animal life in nature's bitter struggle for existence. The late Professor Patten declared that "Each nation has a strong tendency to love what its environment can furnish with the least expense."[2] Mr. J. A. Hobson, a contemporary English writer, believes there is such a process of natural selection which makes for the survival of those standards which contribute to the progress of society.[3] No doubt some features of our consuming habits have been adopted because of their importance for social health. Many of the things we habitually eat have certainly been selected because of their proven nutritive value and cheapness, such as potatoes. The recent tendency in women's dress towards shorter skirts and looser clothing is perhaps based on their greater convenience and healthfulness. But it is too sanguine a view to believe that standards of consumption are generally subject to a process of selection so rigorous that the unfit ones tend naturally to die out while the socially more desirable ones endure. The truth is that some socially undesirable standards may persist for hundreds of years.

Pecuniary Emulation and Conspicuous Consumption.—The folly and waste of many of our consuming habits have been especially well exposed by the penetrating analysis of the brilliant American economist, Thorstein Veblen.[4] It is Veblen's contention that many existing standards are the outgrowth of efforts by the rich to demonstrate their superior power and prestige, by elaborate ways of living. Things come to be consumed, not because of any capacity which they have to contribute to human welfare, but simply as a means of exhibiting the great opulence of their possessors. The rich disport themselves in silken garments and jewels and limousines. They maintain their exclusive colonies, such as those at Newport and Palm Beach, where they idle away weeks of time in conspicuous leisure. This

[2] S. N. Patten, *The Consumption of Wealth* (1889), p. 36.
[3] J. A. Hobson, *Work and Wealth* (1914), p. 10.
[4] *The Theory of the Leisure Class* (1899).

desire to acquire distinction in the eyes of one's fellow men permeates our standards of dress, our recreation, our art, and even our religious observances. It is well known that imitation is a potent force influencing social life. It is but natural, therefore, that imitation of the rich should influence the standards of consumption of the poor and moderately well-to-do. So the spirit of conspicuous display permeates the consuming habits of all classes. Even the working girl must have her imitation jewels, her silken hose, her fur coat, often at the sacrifice of other things which would contribute far more to her comfort and well-being. Altho Veblen may have exaggerated this influence in modern society, the general truth of his description is hardly to be denied.

Producers' Control of Consumption Thru Advertizing and Salesmanship.—The consumer is said to be free to choose what goods he shall purchase. It is true that there is very little external authority or compulsion to dictate his expenditures, but no human being is a law unto himself, directing his behavior entirely irrespective of outside forces. The strong influence of social standards has already been emphasized. The consumer is also influenced strongly by the producers whose goods he is to purchase. The suggestible nature of most individuals, coupled with the marvelous development of advertizing in recent years, makes the producers' control of consumption a potent factor in our economic life. Here again there is opportunity for the misdirection of industrial activity. Mr. Stuart Chase[5] has estimated that there is over a billion dollars spent in advertizing in this country every year, involving directly or indirectly the labor of some 600,000 men and a huge investment of capital. This advertizing has for its purpose the control of consumption by producers, and it is so cleverly planned and carried out that it has an immense appealing power. Day after day we are bombarded from newspapers, magazines, street cars, letters, and billboards with suggestions to buy this or that. The combined influence which these suggestions make upon us, consciously or unconsciously, is enormous. The principal motive of business men is to make profits. We rely upon the free choice of the consumer to make it profitable for the business man to produce only those things which the consumer really desires; but if the producer can himself control the consumer, the consumer may be made to buy what really does not contribute to his welfare at all.

This does not mean that all advertizing is undesirable. Much of it has undoubted value to the consumer. It brings him into contact with means of satisfying his wants of which he might otherwise remain in ignorance. It educates him to the use of new products and devices which improve his manner of living, and it stimulates him to work harder in order to earn the

[5] *The Tragedy of Waste* (1925), p. 109.

means wherewith to buy the goods he sees advertized. There are other advantages which might be enumerated. Unfortunately, there is also much waste in advertizing. Thru advertizing a market is created for many products which possess little utility or may even be injurious. Think of the vast quantities of patent medicines, most of which are quack nostrums or worse, that are foisted upon the American public every year thru appeals to fear and superstition. Advertizing plays up to the weaknesses of human nature, and encourages those habits of conspicuous consumption which have just been described. The clothing trade encourages people to wear more expensive and elaborate forms of clothing. The dairy industry encourages them to eat more dairy products. The automobile industry stimulates a desire for motor cars. The tobacco industry is engaged in a vigorous campaign to increase the use of tobacco among both men and women. The development of the oil industry has provided an opportunity for promoters of fraudulent stocks to mulct millions of dollars from gullible American investors. Whether or not the benefits of advertizing outweigh its advantages we need not try to decide. Mr. Chase estimates that in a properly organized society only about ten per cent of our present advertizing activities would be needed, but whether this is a fair estimate or not, the important fact cannot be denied that advertizing is the source of much misdirected and wasteful consumption. If it is itself harmful unless the [illegible]

Salesmanship is simply a more personal form of advertizing. The salesman, by his direct contact with a prospective customer, can accomplish in a more effective way, but by very much the same methods and to much the same purpose, the results that are aimed at in advertizing. Salesmanship contains in it, therefore, the same elements of utility and of waste which are characteristic of advertizing.

Waste in Consumption, or Illth.—In the preceding paragraphs a number of opportunities for uneconomical expenditure by consumers have been outlined. Production will follow consumption, whether it be for good or for ill. Consequently every unwise choice on the part of consumers brings about the production of some useless or even injurious commodity. To these worthless commodities John Ruskin gave the term *illth,* to distinguish them from *wealth,* which he regarded as an ethical term, properly applicable only to goods which contribute to well-being. As a result of the ignorance, folly and irrationality of consumers, and of the influence of advertizing, the amount of such illth annually produced in this country must be very large. Chase has suggested a number of forms which it may take.[6] These are, in brief:

The military establishment, a large part of which he regards as aggressive and destructive, rather than defensive; deleterious drugs, opium, alcohol,

[6] *Op. cit.,* Chaps. V and VI.

tobacco, and worthless patent medicines; commercialized vice, which maintains thousands of people in brothels to pander to the illicit passions of men; quack doctors and healers of all sorts, stock swindlers, etc.; gambling houses, bucket shops, and uneconomic (as distinguished from useful) speculation; the conspicuous consumption of luxuries by millionaires (and people of more moderate incomes as well); loss of goods by artificially stimulated fads and changes of fashion; commercialized recreation, such as prize-fighting and much of our professional athletics; certain "overhead trades and professions" like the law, government, and insurance, all of which make genuine contributions to welfare, but which are overdeveloped to take care of legal technicalities, industrial risks, and public graft, which could be very much reduced in a more effectively organized society. Chase estimates that the labor-power of more than ten million persons is annually wasted in producing these various forms of illth.[7] This figure is little better than a guess, and it may be exaggerated; but if we were to cut it in half, it would still represent a waste of labor-power that would be appalling.

Consumption and Saving.—So far we have been discussing *what* is consumed—a qualitative problem; but there is also the question *how much* is consumed—a quantitative problem. In the long run, a people's consumption is limited by its net income; that is, by what income remains after providing for replacement of the capital worn out in production. A nation can consume more than this only by using up its productive capital without replacement. Most countries, including the United States, did just this during the World War, when the urgent necessity of carrying on the conflict took precedence over everything else. We then consumed recklessly, and allowed much of our capital to depreciate. Railroads and factories were not kept in repair, machinery was overworked and abused, and so on. Such a policy, if long continued, would mean national decay; for if productive capital is allowed to deteriorate, its productivity will decline, and eventually the flow of income will grow less. Therefore, provision for the annual replacement of the wear and tear on the nation's capital is a paramount necessity for the continued prosperity of a nation. Even if we consume only our *net* income, however, after allowing for replacement of impaired capital, we are merely maintaining the status quo. We are not providing for progress. Continuous increase in income usually requires an increase of capital. The student of elementary economics will realize that such increase must come from saving. In modern society we save by investing a part of our income, such investment being simply the employment of labor and resources in the making of capital goods of one kind or another.

In an individualistic society like ours, this process of saving depends on the habits of thrift of members of the community. Industrial progress requires that society as a whole abstain from the use of some of its current

[7] *Op. cit.*, p. 107.

income. The portion which is not used in consumption is added, by investment, to the existing stock of capital.

While it is wise for a nation constantly to augment its stock of capital, we cannot always expect an individual to do so. Persons with very low incomes and large responsibilities, aged folk, young people during their school years, can hardly do other than consume their entire income. But as a general rule, society will benefit if, during the entire life of an individual, he produces more than he consumes. Here we must interpret production broadly, including all types of services which tend to make the social life healthier and better.

So far as the United States is concerned, insufficient saving need not cause much concern. Tho there are some classes in the community which are consuming wastefully, the preceding chapter showed that the nation as a whole is increasing its supply of capital. Prior to the depression of 1929–1933, we were saving annually about five billion dollars, in addition to providing for the replacement of worn-out capital. This represented about one-twelfth of our income.[8] This fund of increasing capital, coupled with progress in science and invention, is largely responsible for our increasing production.

Consumption and Productive Efficiency.—In one sense the end and goal of all productive activity is to provide consumers with goods; and consumers' choices direct and control the whole process. But in another sense, consumption is but a means to further production. Wholesome work is just as much a part of the purpose of man's existence as any of the other things he does. Now a man's productive efficiency depends upon the way he lives—that is, upon the kind of things that he consumes. This affords one test by which we can judge of the efficacy of consuming habits. Some ways of living tend to enervate the individual, impairing his capacity for further economic effort. Among the very rich excessive luxury and indulgence soften both the mind and body. Among the poor insufficient nourishment and unsanitary methods of living, coupled oftentimes with dissolute habits, break down the morale and health of the worker. The middle classes also have their vices and bad habits which interfere with their productive efficiency. From the viewpoint of national prosperity, all forms of consumption which hinder vitality and ambition prevent men from making the greatest contribution to production of which they are capable. This dovetails with the weaknesses of our standards of consumption outlined in the earlier paragraphs of this chapter. Most of the forms of consumption which were characterized as illth have this deleterious effect upon consumers' efficiency as producers. Wise national policy should seek to reduce these forms of consumption to a minimum.

[8] W. I. King, *The Net Volume of Savings in the United States,* in the *Journal of the American Statistical Association,* September, 1922, p. 322.

B. A Program for the Improvement of Consumption

Five Precepts of Consumption.—The defects in our consumption which have just been set forth indicate the direction which a program for their correction should take. We should seek what may be called a high standard of living, meaning, by that, such a standard as leads truly to national prosperity. Such a standard must provide first of all for those wants which are clearly conducive to the welfare of the individual, providing the fullest scope for the development of his character and physical health. An intelligent and rational consumer would never knowingly spend his income for any good which would interfere with the highest development of his mind, his body or his productive efficiency.

Furthermore, this should be accomplished with economy; that is, with as little dissipation of productive energy in the process of satisfying wants as is practicable. Some writers have endeavored to lay down certain precepts of consumption, obedience to which will accomplish such economy, giving a maximum of gratification with a minimum of cost. The first of these is the *principle of harmony,* which states that *one's choices should be selected in harmonious combinations,* in eating, and in dress, and in all our habits of life. It is possible to choose things which do not go well together, bringing indigestion or ugliness or some other fault, or to choose things that blend pleasingly, making for beauty and health. The second is the *principle of variety,* which states that, *all other things being equal, variety in consumption gratifies more desires than does uniformity.* This follows from the law of diminishing utility, with which the student is already familiar. If we increase the consumption of any one good, its monotony causes the utility we derive from it to decline. Therefore, variety in consumption is true economy, leading to greater satisfaction than does uniformity. The third is the *principle of least social costs,* which means that *those goods are most economical whose cost of production is least in proportion to their utility.* For instance, the American people rely very largely upon wheat for their diet, but it would be more economical to use oats. An expenditure of thirty-four cents for oats will yield as many calories of food-value as an expenditure of forty-eight cents for wheat.[9] Judged by this principle, many of our standards of consumption would prove to be very extravagant and wasteful. However, in following this precept, due attention must be paid to the principle of variety. For altho one may, like the Chinese, live very cheaply on a simple diet consisting mainly of rice (and with corresponding frugality in all other respects), the additional gratification from a more expensive, but varied, existence may more than offset its extra cost. To these three principles, stated many years ago by the late Professor Patten,

[9] Stuart Chase, *op. cit.*, p. 54.

we may add two others, corresponding to the standards of consumption laid down in the last two paragraphs above. The fourth we may call the *principle of thrift,* which requires that *each individual should add something to the social capital by consuming less than he produces.* And lastly, there is the *principle of productive efficiency,* which admonishes us *to follow those habits of consumption which make good producers.*

Sumptuary Legislation.—To a certain extent economy and efficiency in consumption can be promoted by sumptuary legislation. Some people think it would be ideal for the standards of living of the people and their consuming habits to be directed by governmental authority. This is the view of the communists, of whom we shall have more to say in a later chapter. In the United States, however, most people believe in individual liberty, and nowhere is this principle more tenaciously clung to, and its infringement more strenuously opposed, than in matters relating to consumption. The American citizen feels that he has a right to live as he pleases, and that no government or other authority should dictate how he should spend his income. From the standpoint of national efficiency, there may be just as much justification for laws controlling consumption as those controlling production or any other phase of economic activity, but the contrary popular attitude is one which must be recognized in formulating any feasible program.

This is well illustrated by the prohibition experiment carried on in the United States from 1918 to 1933. Altho ostensibly a law to prevent the manufacture and sale of alcoholic drinks, it was, in effect, designed to prevent the consumption of such beverages. The liquor traffic results in so much economic waste and social evil that there is much to be said in favor of its elimination; but it is almost impossible to enforce so drastic a piece of legislation, unless it has the hearty support of a great majority of the people. The prohibition amendment did not have such support, and its enforcement was far from effective. Its repeal, consequently, is not to be wondered at.

Notwithstanding the difficulty of enforcing sumptuary legislation, governments in this country and abroad have succeeded in restricting or directing consuming habits in various particulars. Often there are laws prohibiting the use of certain articles, such as opium and other habit-forming drugs, obscene literature, and pictures. Censorship of motion pictures and plays are of a similar character. Then there is the attempted suppression of vice, gambling houses, and the like. During the World War the control of consumption was carried much further than ever before. This was made possible by appeal to patriotic motives, which led people to tolerate petty interferences that ordinarily they would not have submitted to. But this, like most legislation of the sort, was indirect. It took the form of controlling the kinds of goods that could be made and offered for sale, thus operating on producers, rather than definitely controlling the behavior of the con-

sumer himself. Nevertheless, the purpose of such legislation was to turn consumption into certain channels, and it had that effect. For instance, bakers were ordered to put certain proportions of substitutes for wheat flour into their loaves, sugar was rationed out sparingly for the unessential purposes of making candy and soft drinks, and even the amount of sugar which hotels and restaurants could serve to their patrons was greatly cut down. Similar measures were extended to other commodities, including fats and certain perishable foodstuffs. Following the war, however, these restrictions were removed, and freedom of choice in such matters was restored to the consumer.

While sumptuary legislation offers possibilities of improving consumption in a few special cases, our experience on the whole indicates that we must rely on other measures to accomplish the desired results.

Government Protection of Consumers.—The analysis in Part A of this chapter indicated that one obstacle to intelligent and correct consumption rests in the consumer's lack of information as to the true character of the commodities offered for sale. Having no facilities to obtain expert knowledge of what he buys, he becomes an easy prey to unscrupulous business men who foist upon him adulterated and injurious commodities. The government can be immensely helpful in this connection by laws designed to protect the consumer from such exploitation. A good example is the United States Pure Food and Drugs Act, which was adopted in 1906. This act strictly specifies what shall constitute adulteration in the manufacture of certain drugs, confections, and food products, and provides that "All drugs or articles of food or articles which enter into the composition of food" shall be considered misbranded "the package or label of which shall bear any statement, design or device regarding such article or the ingredients or substances contained therein which shall be false or misleading in any particular." Appropriate penalties are provided for violation of this law, and its enforcement is vested in various departments of the government.

Another organization of the federal government that is doing much to protect the consumers against unscrupulous business methods is the Federal Trade Commission. This commission has authority to prohibit methods of competition and monopolistic practices and prices. The agents of the commission have been quite diligent in carrying out the duty, imposed upon them by the law, of investigating where there was reason to suspect the existence of illegal practices, holding hearings, making the facts known, and issuing orders to put a stop to abuses where found. An example of this is the case of certain manufacturers of mercerized cotton who were putting their product on the market as silk. The mere announcement that a public hearing was to be held on this practice was enough to put a stop to it. "The commission has recently been called on to prevent deception or misrepresentation in

such widely separated fields as the imitation of existing firm names in wholesale shoe distribution, the sale of live-stock medicines which did not contain the ingredients represented, the deceptive advertizement of certain brands of hogs as being immune to cholera, pneumonia, and other diseases, the advertizing of a new brand of baking powder under an old name, the misleading advertizement that a retail company's teas and coffees were personally selected by its representative in the finest plantations of the world, when 75 per cent of its teas and all of its coffees were purchased from wholesalers and importers in this country, and so forth."[10] The commission has been effective in preventing price discrimination between different consumers and other undesirable business practices. It is encouraging to note that a considerable proportion of the cases handled by this commission have been initiated by honest business concerns seeking to protect themselves and the quality of their goods from the unfair practices and adulterated product of their unscrupulous rivals. However, the Federal Trade Commission does not exist for the benefit of the consumer *per se;* it is intended to protect one business enterprize against the unfair competition of another, and any benefit which the consumer derives is merely incidental.

Other governmental bodies to assist the consumer have been established at various times, but their accomplishments have been rather disappointing. The Bureau of Home Economics has been constantly handicapped by inadequate appropriations and is helpless to oppose the interests of producers. The Consumers' Advisory Board, set up under the National Industrial Recovery Act to represent the interests of consumers in the formulation of codes, was accorded no vote on the approval or rejection of these codes. The Agricultural Adjustment Administration also had a Consumers' Counsel to examine marketing agreements and publish information regarding retail food prices. For several years it secured considerable publicity concerning unreasonable prices, but since its reorganization in 1935 it has been relatively ineffective.[11]

There is still needed some government agency directly charged with the duty of giving consumers honest and accurate information about the goods they buy. It has been suggested that there be established for this purpose a Federal Department of the Consumer with a cabinet officer at its head. The consumer would thus be given protection by a permanent body created to represent him. The United States Government already has a Bureau of Standards to guide it in making its own purchases. It is equipped with laboratories and technicians qualified to make tests of every conceivable kind of merchandize, and it is continually making such tests. But these are for the use of government bureaus in securing supplies; the wealth of

[10] James T. Young, *Sales Policies and the Federal Trade Commission,* in *Annals of the American Academy of Political and Social Science,* Vol. 115, p. 25 (Sept. 1924).

[11] For a fuller discussion of such agencies see Charles S. Wyand, *The Economics of Consumption* (1937), Chap. XIII.

information about qualities and products of different producers now resting in its files are not available to the general public. This is in contrast to the practice of the British government. Its National Physical Laboratory is similar to our Bureau of Standards, and its findings are open to the public. Our Bureau of Standards should do likewise. Such a policy could injure no one except those producers who make inferior goods and palm them off on unsuspecting purchasers. Such producers ought to be forced to come up to the standards of those who make better merchandize, or go out of business. Publicity of findings by the Bureau of Standards would put American consumers in a position to know what they are buying, and would go far toward ending many of the abuses described in the earlier sections of this chapter.

The Better Business Movement.—Business men with some conception of their duty to their customers can decrease the wastes involved in deceptive advertizing and the marketing of claptrap merchandize by organized effort of their own. Of course many of the wastes of display advertizing, designed to attract consumers to this or that producer and to win him away from some competitor, must necessarily continue so long as the competitive system of industry itself survives. On the other hand, it is possible to control the deliberate misleading of the consumer by exaggerated or untruthful advertizing. The Associated Advertizing Clubs of the World, at their convention in Baltimore in 1913, passed a resolution endorsing truth as the cornerstone of all honorable and successful business, and at the same time organized a National Vigilance Committee which, in coöperation with "Better Business Bureaus," set up among the business men of many local communities, has been actively sponsoring a truth-in-advertizing movement. In 1935 there were affiliated with the National Better Business Bureau fifty-four local bureaus in the United States and Canada.[12] The purpose of this movement and of the affiliated business bureaus, as its name indicates, is to eliminate untruth and fraud in advertizing. It has been instrumental in exposing and putting to rout considerable numbers of fake stock-promotion schemes, speculative building and loan projects, fraudulent use of well-known trade marks, and various kinds of misbranding and untruthful advertizing. Among its activities has been a campaign to eliminate the practice of advertizing goods as reduced in price when in fact they are not so. The National Bureau concerns itself primarily with the standards of national advertizing, while the local bureaus deal with unfair practices in their own communities only. This movement is clearly to be commended, but it can hardly be expected to do more than eliminate the grosser forms of lying and deceit in advertizing. Since it is the purpose of advertizing to be alluring to the prospective customer, it is almost inevitable that its descrip-

[12] National Better Business Bureau, Inc., *Annual Report* (1935), p. 1.

tions shall be exaggerated and to some extent misleading. But if even the worst practices can be eliminated by the business men themselves and by public agencies, a great step forward will have been taken.

Other Organizations to Help Consumers.—In addition to the governmental bodies and Better Business Bureaus already mentioned, there are numerous private organizations which assist, directly or indirectly, in guiding consumers to wise purchases and better standards of living. Such are The American Medical Association, which warns the public against the use of quack nostrums, The American Institute of Architects, which encourages the building of better homes and the improvement of town planning, The Anti-Saloon League and the Women's Christian Temperance Union, which fight against the evils of the saloon and over-indulgence in alcoholic drinks, the National Motion Picture League, which promotes the patronage of the better types of motion pictures, and many other consumers' organizations and private philanthropies.[13] More might be done along these lines by consumers themselves, thru the formation of consumers' guilds or other associations definitely aimed at eliminating the obstacles which now stand in the way of wise consumption.

In recent years several consumer organizations have been established for the purpose of supplying their members with definite facts about the various products offered them for sale. Deriving their income from annual membership fees, they secure information from laboratory tests and other sources which is sent to their members in periodic bulletins.[14] While lacking the facilities for doing such work in as elaborate and scientific a way as the United States Bureau of Standards, they are doing some effective work toward enabling their subscribers to judge correctly the merits and defects of what they buy. Such organizations show what might be done by consumers to look after their own interests if they were organized *en masse* to do so.

Education of the Consumer.—In the last analysis, improvement in the arts of consumption is a matter of education. We must build up in the consumer a desire for right ways of living, and provide him with the knowledge whereby he can adopt such ways. Our present educational system trains him in cultural subjects, and, to a certain extent, in vocational lines which will help him to secure an income, but there is little in our curricula which teaches him how to use that income wisely, once it has been acquired. He is expected to pick up from his family life and environment the knowledge necessary to live wisely. Enough has been said to show that the result is far from satisfactory. An indication of some things that

[13] For a fuller discussion of such organizations see E. E. Hoyt, *The Consumption of Wealth* (1928), Chap. XIX.

[14] See the literature published by Consumers' Research, Inc., Washington, N. J., and The Consumers' Union, New York, N. Y.

can be done to correct these difficulties is to be found in the domestic science courses now spreading in our public schools, and in a few other subjects; but the possibilities have hardly been touched. Thru the public schools, thru educational advertizing by the government itself, and thru various other agencies, some examples of which have been suggested in the preceding paragraphs of this chapter, it should be possible to carry on a campaign of education designed to cultivate higher standards of living among the American people. This would go a long way towards building up those wise habits of consumption which will direct production into channels that make for real prosperity.

Summary

In a régime of free enterprize, consumers' choices, acting thru the price system, direct production. Much economic waste in this process results from ignorance of the consumer and lack of standardization, which prevents him from knowing the real quality of the goods he buys. This is accentuated by irrational standards of living, which are based upon the desire to display wealth rather than to live wisely. Producers' control of the consumer thru advertizing and salesmanship often leads him to buy goods which he does not need, or which are even injurious. As the result of all these influences large quantities of goods are annually produced which are to be described as illth rather than ethical wealth.

Social progress demands that part of the national income be saved, thereby providing capital growth for future increased production. Hence individual thrift should be promoted. Consumption should also be so directed as to promote the productive efficiency of consumers, avoiding dissipation and unhealthful habits.

A wise program of consumption should seek to establish standards of living which will yield the greatest utility to the consumers, with economy in the production thereof. This requires attention to the principles of harmony, of variety, of least social cost, of thrift, and of productive efficiency. Governments can promote such standards in part thru sumptuary legislation, but this will only suffice to prohibit the most flagrantly injurious forms of consumption. Deception of the consumer, adulteration, and misbranding can be prevented by appropriate laws and agencies, such as the Pure Food and Drugs Act and the Federal Trade Commission. The grosser forms of fraudulent advertizing are being somewhat reduced by the Better Business movement among business men. Finally, various organizations among consumers themselves are helping to guide them to the wise use of the goods made possible by modern productive methods. These measures should be extended, and supplemented by further education of the consumer thru the public school system and public dissemination of information on the arts of living.

SUGGESTIONS FOR FURTHER READING

Hazel Kyrk did much toward developing a coherent treatment of the neglected subject of consumption in her book, *A Theory of Consumption* (1923). A more comprehensive survey, treating the psychological, sociological, and economic aspects of the subject, is to be found in E. E. Hoyt's *The Consumption of Wealth* (1928). Charles S. Wyand's *The Economics of Consumption* (1937) is likewise a comprehensive treatment of its field, containing a great deal of pertinent factual information, but its theoretical position is not always above criticism. Margaret G. Reid's *Consumers and the Market* (1938) offers a well-developed analysis of our marketing organization as it affects the consumer. Chapter XXII of Sumner H. Slichter's *Modern Economic Society* (1928) gives a good brief treatment of "The Position of the Consumer," and there are several chapters of *Recent Social Trends* (1933) which deal with consumption, especially Chapter XVII of Vol. II, by Robert S. Lynd and Alice C. Hansen.

T. Veblen's *The Theory of the Leisure Class* (1899) is a brilliant and justly famous exposé of the conspicuous waste involved in our pecuniary standards of consumption. A general description of the importance of thrift in consumption, the relation between consumption and productive efficiency, and the control of consumption by sumptuary legislation and natural selection is to be found in T. N. Carver, *Principles of National Economy* (1921), Part 6.

John Ruskin's *Munera Pulveris* shows keenly the superficiality of many of our ideas of wealth and has been the inspiration for a number of modern writers on the same theme. See, for instance, J. A. Hobson, *Work and Wealth* (1914); and W. A. Robson, *The Relation of Wealth to Welfare* (1925).

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PART II

THE PROMOTION OF EFFICIENCY IN THE ORGANIZATION AND RELATIONSHIPS OF THE PRODUCTIVE AGENTS

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CHAPTER IV

EFFICIENCY IN MANAGEMENT

A. The Nature and Purpose of Scientific Management

Inefficiency in Management.—The productive process should operate so that the scarce agents of production will be made use of in the most efficient manner and with the minimum of waste. The test of the success of that process rests in the flow of utilities being constantly maintained at the highest possible point. We begin our analysis of the efficient utilization of the productive agents with the part played by the business enterprizer—the management of industry. Chapter II recorded the heavy economic loss that is suffered through the prevalence of waste in industry. The responsibility for this waste rests primarily on management. A successful engineer has summarized the case against management in six specific indictments, charging:[1]

"1. That seventy to eighty per cent of the inefficiency in industry has been due, and is now due, to the shortcomings of management.

"2. That management has not realized, and does not now realize, that its shortcomings are the cause of our industrial inefficiency.

"3. That management has not provided, and is not now providing, the wisest industrial leadership.

"4. That management has not accepted, and is not now accepting, to the greatest extent possible the best advice obtainable on technical and managerial matters.

"5. That management has not given, and does not now give, due consideration to the fact that it deals with efforts and human beings instead of raw material and inanimate things.

"6. That management has felt, and now feels, that workers, bankers, and politicians are responsible for the inefficiency of industry."

This indictment appears more trenchant and timely today, than when it was written in 1921. Viewing the serious inefficiency of industry, business executives have been slow to accept their responsibility and have preferred to place the blame usually on the so-called radical agitators, on financial pressure from Wall Street, or on some political cause such as the tariff or a

[1] C. E. Knoeppel, President of C. E. Knoeppel and Company, Inc., *What Is Management in Industry? Management Engineering Magazine,* July 1921, p. 23.

new tax bill. Executives should put to themselves the question, "Have you conserved to the fullest extent possible the time of your mental and physical workers, the time use of your equipment, tools, and facilities, the time use of your floor space, the time use of your materials in stock and in process, and of the money invested by you and in you?"[2] By assuming such a point of view and making a scientific survey of the strength and weakness of his own plant, the business executive can make an effective start toward the elimination of inefficiency in management.

The Work of Frederick W. Taylor.—It is not often that a movement of tremendous importance is universally admitted to be the work practically of one man, but such is the case with the modern scientific management movement. The work of Frederick W. Taylor furnished the originality and the inspiration upon which modern management principles are based. Taylor's experience while in the employ of the Midvale Steel Plant in Philadelphia convinced him that workers were not giving to industry the best they had to give. He believed that this deficiency was due in part to the lack of information as to just what was a good day's work and how it should be accomplished. To impart this information is a function of good management, but it is a duty that is seldom fulfilled. Taylor crystalized his thought into four broad principles:

"First, the development of a science for each element of a man's work, thereby replacing old rule of the thumb methods.

"Second, the selection of the best worker for each particular task, and then training, teaching, and developing the workman; in place of the former practice of allowing the worker to select his own task and train himself as best he could.

"Third, the development of a spirit of hearty coöperation between the management and the men in the carrying on of the activities in accordance with the principles of the developed science.

"Fourth, the division of the work into almost equal shares between the management and the workers, each department taking over the work for which it is the best fitted; instead of the former condition in which almost all of the work and the greater part of the responsibility were thrown on the men."[3]

At the Midvale plant Taylor began his experiments by making a study of the use of cutting tools in the steel industry, and the findings were later published in a now famous article, *The Art of Cutting Metals.* This article, together with his little book on *Shop Management,* constitutes both the beginning and the foundation of scientific management. In his study of steel cutting, over fifty thousand recorded experiments were made, and over eight hundred thousand pounds of iron and steel were used. The work was

[2] *Ibid.,* p. 24.
[3] F. W. Taylor, *Principles of Scientific Management* (1919 edition), p. 13.

later continued at the Bethlehem Steel Plant, and the total period of experimentation was about twenty-six years. The results obtained revolutionized the whole steel industry, the discovery of high-speed steel alone having practically a revolutionary significance. The famous illustration of time and motion study applied to handling pig-iron, recited below, was made during the period of Taylor's employment at the Bethlehem Steel Plant.

The Scientific Method in Industry.—The scientific method implies the solving of a problem by seeking all the facts available, classifying those facts, and drawing conclusions warranted by the facts. The essence of science is the explanation of an effect in terms of causes which grow out of the subject-matter analyzed. To meet its responsibility, management must carry over into the field of industry the scientific method. Industry must solve its problems, not merely by guesswork, intuition, or that vague fund of knowledge called experience, but by gathering industrial data, classifying those data, and drawing conclusions which will serve as a basis for future activity. To meet its responsibility, management must carry over into the field of industry the scientific method, in its approach both to the problem of physical plant operation and to the problem of the human relations within the plant. An industrial enterprize must be scientifically managed in both its physical and human aspects.

It seems strange that industrial leaders had not only to be taught this method, but also to be convinced of its practicality. To illustrate, men were, and still are, frequently hired simply by selecting at random the required number from the numerous applicants for work. Often the only training obtainable is actual experience on the job, plus some advice by fellow-employees. Methods of promotion to better positions of responsibility are often developed little beyond the process of the foreman or superintendent picking out the "men that look good." Taylor, in addition, found almost no accumulated knowledge resulting from scientific investigations as to the efficiency of various types of machinery and of various methods of operation. Industry depended on the crude working out of the doctrine of survival of the fittest as the means of maintaining general efficiency. The effect on the workers in a plant was disastrous, each individual, unconsciously perhaps, seeking to do only sufficient work to hold his position.

The four principles of good management stated by Taylor struck at the very roots of these inefficient policies. As to his first principle, instead of each man doing his job in his own way, each job was to be scientifically studied until, by experimentation, the one best way to complete the work was found. Secondly, this one best way was to be taught all men doing the job, and they were to be told just how long it should take to finish each appointed task. New employees were to be selected after thoro examination as to physical and mental health, along with practical trade knowledge.

Each man was to be selected with the different requirements of the job he was to fill in mind. Thirdly, management was to make a strenuous effort to convince the workers of its interest in their success; coöperation between men and management is necessary to maintain a high morale in a plant. And, finally, whatever the profit resulting from the scientific management, both men and management should share in it according to some prearranged plan.

This same method Taylor insisted should be applied to the selection and utilization of equipment. The illustration above given of the art of cutting metals indicates the method to be followed. Management experts who followed Taylor carried his ideas into every phase of modern business. Not only the production department, but also sales, purchasing, accounting, credit, and all other departments must make use of the same methods, adapted, of course, to their respective types of work. Industry of the future must be operated with the same scientific method a skilled chemist makes use of in his laboratory.

The Obligations of Industry.—In any study of industry, especially a study of the management of industry, one should keep in mind a threefold obligation: the obligation to investors, to the workers, and to the public. No business under the modern system of enterprize can succeed unless it makes a profit. High ideals will elevate the tone of industry, and there is much that can be accomplished in this direction by industrial managers, but unless at the end of the fiscal period the books show a profit, the business is not long going to hold its place in industry. Profit must be earned if a business is to survive. The obligation to the workers is that they must be treated as working human beings, not merely as cogs in the industrial machine. To illustrate, a high official in an American steel company some time ago stated that unless the immigration bars were let down, cost of production would become prohibitive in the steel industry, making its survival difficult. Now, cost of production in this sense meant high wages, and a wage is a man's living. So what this official actually stated was that unless the immigration bars were let down and the standard of living of steel workers reduced, the steel industry, in his opinion, could not survive. Such a statement brings to one's mind a very different picture than the wording actually used. It *may* still be true, granting the truth of the facts of the case, that the steel industry should be maintained and not allowed to suffer too much because of increasing wages. However, such a problem should be faced frankly, recognizing that you are dealing with standards of living of people and not with inanimate machines, as implied in the phrase "cost of production." To the public, industry owes a deep obligation, for the whole function of industry is to create the means whereby human wants can be satisfied. The success of the industrial organization must, in the last analysis, be judged in terms of social welfare.

B. A Survey of Scientific Management Principles

The Field of Management.—It would be both impossible and unprofitable for us to make a detailed analysis of the field of industrial management. Our interest is in ascertaining how the process of production as a whole can be improved upon, and the efficiency of the economic order enhanced, thru good management. But industry is nothing more than a collection of innumerable privately owned and managed industrial plants both large and small, and a study of management must take the individual plant as a basis. The strength of a chain is limited to that of its weakest link, and the strength of the productive organization is dependent upon the degree of efficiency achieved within the numerous individual plants. This approach means that the broader aspects of the reorganization of industry are not here under consideration. Scientific management objectives are limited to improvement in the efficiency of plant operation within the present set-up of industry, and for the immediate purpose of greater profits to owners and employers. The broader (and perhaps more important) questions of industrial reorganization and the control of industry must be reserved for separate study in later chapters.

Before we can improve the average efficiency of industry, we must understand what constitutes "good management," in those plants which today may be classed far above the average in efficiency. We shall consider in this section seven aspects of effective industrial management: first, the acquisition of the best location; second, the use of the best building and equipment; third, efficient production planning; fourth, the use of the best plant organization; fifth, scientific job study; sixth, modern methods of wage payment; and seventh, management research. In Part C we shall discuss the personnel administration phase of management.

Plant Location.—The industrial plant that is poorly located is operating under a serious handicap. The decision as to the best location for a given plant is dependent on many variables, such as the sources of raw material, the sources of power, the market for the finished product, the labor supply available, the climate of the region, and the transportation facilities. Just which of these influences are the most important depends on the nature of the industry and the product which it is engaged in producing. A plant producing a product of very high value and small bulk, such as jewelry, can locate wherever it is most likely to find the skilled type of labor required. Nearness to power, raw material, or the market would be of relatively little importance, since the transportation charge would constitute but a small fraction of the total production cost. On the other hand, plants producing commodities of great bulk and small value must be located near the market in which they are to be sold, or transportation costs become prohibitive. Chemical plants need power as their prime production requisite; they have

tended to concentrate around Niagara Falls and other locations possessing cheap effective power. The manufacture of paper pulp requires lumber, which is expensive to transport, and also cheap power. Pulp plants, therefore, are usually found right on the edge of, or within, the woods; and as the sources of timber are utilized, the mills tend to shift to other localities as yet not exploited. The milling of flour tends to concentrate around the twin cities Minneapolis and St. Paul because of their central location with reference to the wheat-growing area of the United States.

The location of a plant within a city has many decided advantages. The labor supply is plentiful, and if the industry is one that can make use of women and girls, the city offers a cheap supply of workers. There are many economic and social advantages for workers that go with city life—good schools, churches, theaters, and other amusements can be developed more effectively where there is a dense population. Fire protection, transportation facilities, and banking facilities are also more satisfactory. The city furnishes near at hand a large market, and the concentration of industries in that market means that repair shops and sources of equipment supplies are close by, for they tend to concentrate where the industry itself is concentrated. The city has, however, many disadvantages as a location. Rents are high, the price of land is high, taxes are high; and often numerous municipal restrictions are placed on the conduct of industry. There is also the difficulty of later expansion, since it is hard to obtain vacant land near the original plant in a densely populated area. The country location consequently offers some advantages. Cheap land, low rents, low taxes, and lack of legal restriction are to the business men advantages worth considering. Many small localities give land away or give exemption from taxation for a period of years to industries that will locate there. But the difficulty of obtaining adequate labor and the lack of practically every advantage that the city offers counts heavily against the country district. Suburban sites frequently have many of the advantages of the city and the country without the disadvantages of either. The nearby city supplies the facilities of city life, and the open suburban area supplies the advantages, at least in part, of the country district. Factory and community can be planned with a view to future expansion, and the happiness and well-being of the employees adequately cared for.

Once an industry has located, other plants carrying on the same line of work tend to drift to and locate in that same locality. There are very decided advantages in such geographic specialization. A specialized labor supply develops. Equipment industries gather near by. Buyers visit in great numbers, since they can quickly examine the products of many different plants. A general trade knowledge of the particular industry in question can be exchanged thru the coöperation of the various plants. The main difficulty is the tying up of an individual plant too closely with the industry as a whole.

A slump in the industry is going to have a more direct effect on all the plants than would be likely if each one had its own community problems to face. Examples of geographic specialization can be found almost anywhere. The collar and shirt industry at Troy, N. Y., watch-making at Waterbury, Conn., and the shoe industry at Lynn and Brockton, Mass., are good examples. In many cases it is impossible to find an adequate explanation for the localizing of industry, other than the accident of an early start. Each plant faces problems a little different from other industries, and each one has to weigh and balance the advantages and disadvantages involved in its own particular case.

The Building and Its Layout.—The old dark, gloomy factories that still can be found along the streams in many of the manufacturing sections of the East are rapidly disappearing. The modern plant is a structure that gives the appearance of being almost entirely composed of windows. The use of concrete has made it possible to develop a sturdy building and at the same time give a maximum amount of daylight. The use of fire doors, fire-proof materials, and sprinkler systems has reduced greatly the fire hazard in the well-equipped and well-built plants. Just what the size of the plant should be, and how the work should be laid out, depends entirely on the individual industry and the nature of the product. The problem for a factory producing a liquid product is different from that of one producing a solid product. A bulky product creates a different problem from a small, light-weight product. If the industry is primarily assembling parts, as in some phases of the automobile business, the problem is different from that of an industry of the continuous production type, such as the milling of flour, the refining of sugar, or the slaughtering of cattle. In the latter cases, each step in the process requires the addition of a form utility to the semi-finished product. The layout of the factory should be such that each operation takes place in close proximity to the next operation, so that the minimum cartage and space is used. Henry Ford, in his assembling plants, starts the product on its way at the top of the building, and by gravity it moves gradually down to the lower floors. The assembling takes place as the product passes thru each department of the plant.

Production Planning.—Careful planning is the very heart of scientific management. The priority of manufacturing orders, the preparation of materials for filling these orders, the setting up of the necessary equipment—machines and tools—, and the provision of trained workers, must all be planned for in advance so that production will proceed steadily. "Production planning takes these four elements, works with them, each in relation to the other, and operates thru them in such a manner that the product is turned out in the time and by the method that is desired."[4] Routing clerks arrange the path of the materials thru the plant and designate who shall do the

[4] R. H. Lansburgh, *Industrial Management* (1928), p. 436.

work; scheduling clerks designate when each operation shall be performed and how long each shall take to complete; despatching clerks provide for the efficient use of equipment and men, and see that the plans of the routing and scheduling clerks are carried out. Planning reduces the size of inventories that must be carried and reduces waste of time and materials in operation. Formerly the best practice called for a concentration of all planning in one department. This still appears to be the general rule in small plants, but large factories are going over either to a decentralized control or a combination of the centralized and decentralized organization. In the latter case, a central planning department retains responsibility, but delegates detail planning work to the various individual departments. Centralized planning in large plants carries with it the danger that those giving the orders and assuming responsibility, will lose direct touch with the actual conditions of operation.[5]

Plant Organization: The Military Type.—Coördination and supervision of the working force must be developed to a high point thru a modernized method of organization. In general there are three types of organization made use of in industry. They are known as the military, the functional, and the line-and-staff organizations.

In the military type of organization, all the authority centers in, and flows from, the chief at the head of the organization. The minor executives derive their authority directly from the chief, and the foremen derive their authority directly from the minor executives. The foreman is responsible for the workmen's activity. The organization is distinctly militaristic in this flow of authority direct from the top to the bottom, with the head of the organization responsible for the entire operation. The defect of such an organization is found primarily in the responsibility placed upon the foreman. A foreman, under the military system, should possess all the attributes and abilities of a good plant superintendent, and the securing of an abundant supply of foremen with such abilities and capacities is difficult, if not impossible. Put in another way, the military system lacks specialization; and with the failure to make use of specialization, efficiency is lost. The advantage of this type of organization is in the direct line of responsibility established. It seems to work satisfactorily in a small shop.

The Functional Organization.—The scientific approach to the problem of management led Taylor to the conclusion that the most satisfactory form of organization would be one based upon the different functions that must be performed within an industrial organization. He believed that functional management consists of so dividing the work of management that each man, from the assistant superintendent down, would have as few functions as possible to perform. The most marked outward characteristic of functional management lies in the fact that each workman, instead of

[5] *Ibid.*, p. 439.

coming in direct contact with the management at one point only—the foreman, receives his daily orders and help directly from several individuals, each of whom performs his own particular function. In a machine shop, for example, the workman would come in contact with a gang boss, a speed boss, an inspector, and a repair boss. The gang boss is responsible for the setting up of the work in the machines accurately and quickly, and the removal and disposition of the piece after the operation is complete. The speed boss is responsible for the work while in the machine; that is, the act of operation. The inspector is responsible for the quality of the work, and both the workmen and the speed boss must see to it that their work suits the specifications of the inspector. The repair boss is responsible for the maintenance and care of the machines and their accessories. In addition to these production bosses, there are in the planning room four other bosses, known as the order-of-work clerk, the instruction-card man, the time-and-cost clerk, and the shop disciplinarian. The order-of-work or route clerk is responsible for the route of the work thru the shop, from machine to machine, from the time production starts to the final assembling. The instruction-card foreman is responsible for any difficulties arising out of the use of the instruction card. This card tells the workman exactly what he is to do and the method of doing it—the cuts, speeds, feeds, and other directions necessary for the completion of the work as planned by the management. The time-and-cost clerk sends, thru the instruction card, all the information needed by the workmen for recording their time and the cost of the work. The shop disciplinarian, as implied by the title, has charge of cases of insubordination, repeated failure of workmen to do work, lateness, unexcused absences, and similar delinquencies. Thus the workman comes into contact, under a functional type of organization, with eight different supervisors.

The advantages acquired are those that go with specialization. The bosses can be better trained and more quickly taught their work. The degree of ability required by a foreman is reduced, since he need only learn a particular function, and a man can be selected whose capacity is in line with that function. Responsibility is placed on the basis of the functions; and if any particular part of the work fails to maintain its proper standard in the organization, it is very easy to place one's finger on the responsible party. The individual workman also gets better supervision, for specialists in each line are constantly watching him, ready to point out and demonstrate, if necessary, the best way of accomplishing the task that is set before him. The difficulty of the functional system is readily apparent. Can a workman serve several bosses at the same time? Many industrial leaders have voiced strong opinions to the effect that workmen cannot satisfactorily obey several people, each one having practically exclusive authority of a certain phase of his activity. Taylor and some of his followers have denied this charge, but it has been strong enough to prevent the general adoption of the functional

system of organization in industry. A second difficulty is the tremendous amount of clerical work necessary if the system is to operate correctly. Constant checking and filing is required. Many employers believe the cost involved in this clerical work is greater than the gain to be secured.

The Line-and-Staff Organization.—A combination of the military with the functional type is called the line-and-staff organization. It is the outgrowth of actual industrial experience. Employers were loath to put the men under several bosses, and yet they recognized the decided advantage of an industrial organization built on the principle of difference in function. Professor Lansburgh has described the line-and-staff organization as follows:[6] "Under the general manager or operating head of the enterprize there is an immediate split into divisions of operation functional in form. There is, for instance, the comptroller who deals with all office, accounting, and record operations; the manager or director of manufacture, who has under his control all matters relating to plant organization and the manufacture of products; the director or manager of distribution, who controls sales; and in many modern organizations, the director of industrial relations, who deals with all matters concerning personnel. In this development of the main operating organization, it will be noted that there are but few divisions, which means that there will be few persons reporting directly to the general manager. This is an essential of good organization." If there be any phase of the committee idea installed, these heads of divisions will, together with a few other key men, form the Plant Advisory Committee. These, in turn, will be assisted in the formulation of policy for and operation of their own division by advisory committees. The division of an organization into departments avoids the duplication of bosses, gives direct responsibility from top to bottom, and yet recognizes and makes use of the functional line of demarcation in the work of managing the plant. It is the form of organization that has the support of the majority of the experts in the field of industrial management, and it constitutes what we may call the best practice at the present time. Nevertheless, each individual plant has its own special problems and any attempt to establish one of the three technical plans of organization without considerable modification would lead to inefficiency of operation. Modern management demands the intelligent adaptation of the ideas in any or all plans, to meet the specific needs of a given situation.

Scientific Job Study.—It is in the totally new approach to the individual job for the individual worker that the fame of scientific management has largely rested. It is here that Taylor did his best work in applying scientific principles to the problems of industry. According to Taylor, there are four principles that must be kept in mind if the desire of the employer to obtain what he wants—low labor cost, and the desire of the worker to

[6] Richard H. Lansburgh, *op. cit.*, p. 59.

obtain what he wants—high wages, are to be secured. "First, each man in the establishment, high or low, should daily have a clearly defined task laid out before him. This task should not in the least degree be vague or indefinite, but should be circumscribed carefully and completely and should not be easy to accomplish. Second, each man's task should call for a full day's work and, at the same time, the workman should be given such conditions and appliances as will enable him to accomplish his task with certainty. Third, he should be sure of large pay when he accomplishes his task. Fourth, when he fails, he should be sure that, sooner or later, he will be the loser by it."[7] The first two of these principles require scientific study as to the best way of doing the job, the planning of work ahead, and the giving of careful instructions to the worker as to how to proceed. The last two principles necessitate the development of a system of wage payment which rewards good work by extra pay and penalizes unsatisfactory work in some manner. A considerable part of the restriction of production in industry, resulting from the failure of the men to work to the fullest extent of their capacity, grew out of the failure of management to have an adequate understanding with the men as to just what constituted a fair day's work. If the workers worked too hard their rates were cut, management feeling that they were earning too much; and after the rates had been cut several times, the worker simply solved the problem by keeping up a fair rate of speed and refusing to increase the output beyond that point. Each man worked in his own way with whatever knowledge he had picked up thru his contacts with other workmen or thru his own experience in work at the trade. The scientific way of going at the problem of the individual worker's job is to find out thru experimentation the one best way the job can be done. All the workers on each kind of work can then be taught this one best way. A careful analysis of the motions involved in a certain operation, making use of the stop watch to record speeds, will yield a fund of data that will serve as a basis for generalizing as to the best way of doing that operation or job. After allowing for rest periods and other necessary causes of lost time, a fair day's work can be determined; and all the employees, after being taught the new method, can be held strictly to such a standard in their performance. Such a standard is not a guess. It is not the result of custom. It is not due to the whim of the employer. It is the result of scientific study. Two examples will serve to illustrate the method. The most famous of all time and motion studies is that made by Taylor in the unloading of such materials as ore, gravel, coke, pig-iron, and sand from railway cars, and the shoveling of these materials upon piles for use in the blast furnaces of the Bethlehem Steel Company. The simple operations of this work were: picking up of a shovelful of material, walking with it on the level some distance, throwing it down either into a car or upon a pile, and walking back again to get another

[7] F. M. Taylor, *Shop Management* (1911), p. 1368.

load. But this work was analyzed as a time and motion study, with a view to ascertaining the most efficient way in which it could be done. The average production per man was from twelve to thirteen tons of pig-iron a day. After the study had been made, and the results put into operation, the men doing this work were carrying and loading from forty-five to forty-eight tons per day and apparently with less strain and effort than previously required in carrying the smaller quantity. Their earnings increased about sixty per cent.[8] A second interesting study of a very simple job was that Mr. Gilbreth made in the handling of out-going mail in a large office.[9] The saving of just one motion per letter is important when several thousand are mailed a day. Before the study was made the girls were permitted to fold and seal the letters in their own way. A short observation of their work showed there was much room for improvement. Each motion required to fold the letter, pick up its inclosure, pick up the envelope, and insert the letter in the envelope, was carefully analyzed and an effort made to improve on the existing practice. The first attempts were very crude, but the output per girl was doubled. After the final work on the experiment was done, the output was four times greater than it had been when the girls were allowed to do the work in their own way. If these great changes in productivity are possible with a scientific time and motion study of a very simple operation, the possibilities for increased efficiency for the more complex operations can be dimly realized. No operation is too simple and none too complex. One does not have to be an expert engineer or business executive to appreciate what it must mean to have all the workers doing their work in the one best way, found thru scientific experiments. Not only is productivity thus aided, but there are other merits which result from these studies. Motion analysis brings out clearly the strong and weak points of equipment. The studies furnish excellent bases for establishing incentive wages which induce the workers to exercize their full capacities by the assurance that they themselves will profit by their effort. Difficulties of course exist. It is always rather hard to determine just what the allowance for fatigue should be. Our modern studies of fatigue in industry indicate that the development of poisons in the blood, resulting from overwork, not only affect the efficiency of the worker at the time, but tend to accumulate in the system and reduce the life and efficiency of the employee. The advocates of scientific management declare that this can be allowed for, and that a properly managed plant, using the most improved methods, will, on the whole, show a gain in the average health of the employee.

Money Wages Versus Labor Cost.—There is no necessary relation between high wages and high labor cost, or between low wages and low labor cost. A high wage per man may mean a small labor cost per unit of

[8] *Ibid.*, p. 1359.
[9] Cited by R. H. Lansburgh, *op. cit.*, p. 242.

product, if the worker is efficient and working under the best possible conditions. A low wage paid to a man who is very inefficient and working with unsatisfactory equipment, under the supervision of inefficient management, may well result in a high labor cost per piece. The aim of good management is to keep down the labor cost *per unit of output,* not the labor cost *per man.* As a matter of fact, high wages paid an efficient man may result in a reduction of the overhead charges of a plant. A man requires a machine to operate, whether he is efficient or inefficient. When high wages are paid to a man who will produce twice as much as an inefficient worker, the output of the machine per hour is increased, and, not only is the labor cost per piece affected, but the overhead charge of the machine is less. This simple truth, if understood by every enterprizer, would aid materially in solving the wage problems of his plant. "Cheap labor" may be dear as labor cost. Whatever method of wage payment is adopted, it should seek to give justice to the worker and to bring out his best effort, if labor cost per unit of output is to be kept at a minimum.

Time Rate Versus Piece Rate Work.—The two basic methods of wage payment are the time rate method and the piece rate method. The time rate method means paying the workman a specified amount per hour, per day or per week, regardless of his output. The employer buys his time and the disposition of that time rests in the employer's hands. Increasing or falling output does not affect the wage. The workman knows ahead of time exactly what he will earn. Under the piece rate system the worker is paid a specified amount per piece completed. His wage then depends on the number of pieces he turns out. If he works fast, his wage is high; if he works slowly, his wage is low. The difficulty with the time rate is that it encourages laxity on the part of the worker. The difficulty with the piece work rate is that the worker tends to put out a defective article in his rush for a high record of output. Piece work must always be inspected, therefore, very carefully; and most plants have very elaborate systems of inspection when they operate under the piece rate method. From the worker's point of view, piece work has a disadvantage in that it tends to drive him. Under the time rate system the foreman must be employed to keep the worker busy, but under the piece rate system the worker drives himself.

Incentive Wage Rates.—In an effort to meet the difficulties of some of the older methods of paying wages, many experiments have been made with the incentive wage rate plan. An incentive wage rate plan is one that seeks to make the worker's wage directly dependent on his efficiency. The Halsey Premium Plan is one of the best known of these systems. On the basis of the average previous time of doing a job, a standard time is set, and the workman is paid a basic rate for completing the job within that time. If he completes the job in less than the standard time, he is paid a premium in addition to his hourly or daily rate. This premium is a certain percentage

of the additional wage he would have earned had he worked the full standard time. The percentage of the wage premium varies in different plants where this plan of payment has been used. It may range from one-third to one-half of the wages of the time saved. The Halsey plan is simple, easy to understand, and easy to introduce into a new concern. Another plan is the Rowan Premium Plan. Under this plan the worker obtains a standard rate for completing the job within the standard time, as in the case of the Halsey system, but the premium is a percentage of the time worked rather than the time saved. If the time of completing the job is cut to forty per cent, the premium is forty per cent. A third method is the task and bonus system. Under this method the task is analyzed under a time and motion study and a standard time agreed upon for its completion. If the task is accomplished, the workman receives a bonus in addition to his regular hourly wages for the time worked. The greater the time saved, the greater the bonus. If the workman fails to complete the job within the standard time, he is paid only the basic rate and forfeits the bonus. As soon as the workman fails to get the bonus, his case is investigated and an effort made to correct the cause of his failure. Each workman is supposed to be constantly earning the bonus. This system is a development of Taylor's original ideas of wage payment and seems to fit in best with the general principles of scientific management. Whatever be the method of wage payment adopted, it is important that it be used fairly, and not as a device to speed up workers and cut the general wage level. Once the workers obtain the idea that they are simply faced with a scheme to bring profit to the employer, the system is doomed to failure. During the period of transition while adopting a new method, wages should be increased slowly at first, for the effect of creating an unduly high rate and then later being forced to lower that rate creates a very unsatisfactory condition in the worker's mind, even tho the final rate is higher than what he was originally earning.

Management Research.—The earlier conception of scientific management as a "system" with "efficiency experts" as the directing force has given way to a broader point of view. As stated above, modern management applies the ideas of Taylor to every phase of plant operation. In place of a rigid set of plans, we find the emphasis upon an inquiring state of mind and the result has been a continual increase in the stress placed upon experimentation and research. This research touches every aspect of management—general administration, merchandizing and selling methods, clerical operations, and physical production. Many firms maintain very elaborate research staffs.[10]

The Attitude of Labor.—The principle of scientific management holds out great hope for future progress in increasing industrial efficiency, but it must not be pushed too far. The movement is scientific in so far as

[10] See, Taylor Society, *Scientific Management in American Industry* (1929), Part II.

processes, methods, and mechanical equipment are concerned, but on the human side, such as the selection, training, and management of men, individual judgment must always play a dominant rôle. Management, in this latter sense, must always be more of an art than a science. There is danger that the welfare of labor will be disregarded. Scientific management has for this reason faced the opposition of organized labor. The basic principle of unionism, if one may be permitted to point out one principle, is class consciousness. The workers believe that their lot is a common one, that they stand or fall together; and unity of wage standards is to a great measure their goal. The viewpoint of scientific management is just the opposite. It deals directly with each individual worker, endeavoring to make his reward proportionate to his own ability and output. The basic principle in the scientific management of men is to tie up individual effort with indvidual reward. The unions believe it reduces both the skill of the workmen and their responsibility. All methods are dictated by management. A long process of education will be necessary before some of these difficulties are ironed out. Success depends largely on the spirit and ability with which management attacks the problem. If business executives are sympathetic and make the transition gradually, always squarely facing the problems of the worker, success will no doubt result. Recently organized labor has taken a stand in favor of scientific management, if the rights of workers are at the same time protected by giving them a share in the control of industry. This phase of the problem will be briefly discussed in Chapter VIII.

C. Science in Personnel Administration

Personnel Administration Defined.—In an effort to meet the need for a solution of the human problems that develop within an industrial enterprize, a branch of industrial management called personnel administration has recently developed. Personnel administration may be defined as, "That branch of an administrative organization which is primarily concerned to enlist the energy, interest, and good will of all the workers in the organization, to the end of forwarding the defined objects of that organization with the minimum of effort and friction, and with due regard for the welfare of the workers." [11] The aim of a personnel department is to obtain increased efficiency of labor, in order to increase the profits of management, to increase the efficiency of production of economic goods for the public, and to create an atmosphere of human interest and understanding for the workers.

Functions of Personnel Administration.—The chief functions under the personnel administrator's supervision are those concerned with em-

[11] Ordway Tead, *The Field of Personnel Administration*, Bulletin of the Taylor Society, Vol. 8, No. 6, December 1923.

ployment, health and safety, education, research, employees' service, and employees' representation.[12] Each one of these functions in a large organization has a director at the head of a trained staff. The personnel administrator himself should, according to most authorities, be a high official in the general plant organization. He should rank as a staff officer, being placed on a par with the head of the production department. General practice, however, seldom gives the personnel administrator such a high position. The failure to do so is a handicap to the department, for the human problems are tied up with every phase of the organization, and have an important bearing on every policy that the organization may adopt.

Employment and Placement of Workers.—Perhaps the weakest spot of all in the non-scientific plant's treatment of the personnel it employs is the haphazard way in which the hiring of new employees is conducted. Often the employment bureau is nothing but a place for applicants to report, and the hiring decision rests with the individual foremen. Frequently the employment office is placed in charge of a man with no training whatever along that line. In many cases an old employee who cannot be used elsewhere is given the job in a sort of pension spirit. Foremen and poorly trained employment managers will not build up an effective working staff.

Job Specifications.—The employment division should have in its possession a very carefully worked-out list of specifications for every job within the plant that they may from time to time be called upon to supply with a new employee. These specifications should be carefully written and kept on file. They should describe the job carefully in terms of processes, and should describe the personal qualities needed to carry on the processes required. Unless the employing official has an adequate conception of the job to be filled, it is impossible for him to obtain a man of just the right capacities.

Sources of Labor Supply.—The most satisfactory source of new labor is the circle of friends of the employees. The old saying, "Birds of a feather flock together," is firmly believed in by employment experts. If a certain plant is known as a good place to work and the employees are contented and have acquired a pride in the concern, this constitutes excellent advertizing for new employees. A second source is the union headquarters, in case the industry happens to be one in which a strong union organization exists. While many employers do not like to deal directly with the union on employment matters, the practice has the double advantage of quickly and easily obtaining skilled workers and at the same time giving the union a feeling that it is recognized as a factor in the life of the plant. Some concerns use very successfully house-to-house canvassing in the immediate neighborhood. This gives an opportunity, if skillfully done, to aid in the

[12] A discussion of Employee Representation will be found in Chapter VIII, Part B.

building up of a good will towards the plant in the vicinity where it is located. Public employment bureaus, and the graduates of grammar schools, high schools, and colleges, furnish very satisfactory sources. Advertizing in the newspaper in some cases is effective, altho most experts on employment believe that this method should be used only as a last resort. The important thing in tapping labor resources is to secure the type that is adapted to the needs of the plant, and the methods used will, therefore, be directly dependent on the type of industry under consideration.

Interview.—The employment office should be located conveniently and should give the appearance of a congenial and home-like place. The main task of the interviewer is to see to it that the applicant feels at home and that he is being treated fairly as a man. The first view and impression of the plant is lasting, and the employment department bears a great responsibility in making that impression a good one. Just as little formality as is necessary should be used by the interviewer, so that the applicant will feel unrestricted and talk frankly concerning the job he seeks to obtain. The interviewer should be a skilled, mature person, and not a clerk whose entire idea of the work is to hand the applicant a form to be filled out and filed. The interviewer should also introduce the worker to the plant, and see to it that he is established and made acquainted with its facilities.

Test.—The employment department must have some way in which to judge of the capacity and varied ability of the applicants. With the development of modern psychology various types of tests have been evolved, seeking to give in a few minutes an adequate conception of the worker's native ability. Opinions as to the practicability of these tests are rather varied, and evidence could be quoted for and against their utilization in almost unlimited quantities. However, there is a growing feeling that much can be accomplished if tests are carefully given and not relied upon without due consideration of other factors. The simplest form of test is the *performance test,* in which the workman is allowed to demonstrate his ability on the machine which he is going to operate. This method is successful in such cases as the employing of a typist or a comptometer operator. The chief difficulty is that the applicant is under such a severe strain that he cannot properly demonstrate his best ability, and quite often an excellent employee is lost thru his inability to control his nerves during the performance test. *Trade tests* are another widely used type. Under this method, the workman is shown pictures of the tools and machines which he claims he knows how to use, and is asked to point out certain parts, name them, and tell their function. Questions are prepared, the answer to which involves an understanding of the trade. This method is used very satisfactorily in machine shops and similar types of work. Third, there are the general *intelligence tests* such as were used during the World War in the army. The effort here is to try to ascertain the general level of intelligence possessed by the appli-

cant. There is a danger that general intelligence tests will indicate not intelligence but knowledge, since the lack of a background similar to that on which the test was built will result in poor performance. For example, the use of certain industrial psychological tests worked out in northern universities showed the white soldiers to have a higher degree of intelligence than the colored, but the answer may be that the colored applicant from the southern plantations was unfamiliar with the very words and articles used in the test, and failure satisfactorily to answer the questions in problems put before him may have been due to lack of knowledge rather than to lack of native intelligence. Finally, we have the *special ability test,* where the worker is tested for some specific characteristic (steady nerves or keen eyesight for illustration) that is a very important factor in the success of the job for which he is applying. It must be remembered, however, that while tests are useful, there is a danger in too great a reliance on them. After all, a great deal of the success in sizing up a man is dependent upon the examiners' skill at observation. Some individuals have an uncanny ability in sizing up other persons; others lack this ability entirely.

Some General Employment Duties.—In addition to employment and placement of the men, the employment division must take care of the system of transference, promotion, and discharge. In each of these cases a definite policy should be decided upon and the employees given a clear understanding as to what that policy is. This is especially true in the case of discharges. Many plants, however, are reluctant to place the final right of discharge entirely in the hands of the employment department, but some personnel administrators believe that only by the adoption of such a policy can the personnel department fulfill its function adequately.

Health and Safety.—With the employment of a new man should go a complete physical examination. Unless a man is in good health he cannot be an efficient worker. Only lately are we learning the important bearing on general efficiency and well-being of such factors as defective teeth, weak lungs, and under-nourishment. The modern personnel department maintains a plant hospital and plant dental office, each equipped with trained experts and freely available to the employees of the plant. The introduction of such medical and dental work usually is opposed by the employees and requires very tactful handling to function successfully. Accident prevention and the development of sanitation programs also fall within the province of the director of health and safety.

Education.—No employee should be permitted to take his place until he is properly trained for the work he is supposed to do. One very good method of training new employees is the so-called "vestibule school." Before the new employee is given work in the plant proper he is placed in a training room where he is instructed in the work he is to do. This eliminates the wasteful practice of letting a man pick up the knowledge

of his occupation by experience and contacts with fellow workmen. The old apprenticeship system does not operate successfully in large-scale specialized plants and has long ceased to function. Education of the worker, in a broader sense, can be fostered thru the development of workers' classes, evening schools, and coöperation with the educational institutions in the vicinity of the plant. Adequate training of foremen is a very vital part of the educational program. If the institution has a library or a plant magazine, the supervision of these activities falls within the department's scope. Most industrial plants have been very lax in extending educational facilities. Such work is quite often considered a needless overhead expense, devized by some scientist or critic of industry who knows very little about the technical problems. This attitude is fast giving way to a more progressive belief, that the way to obtain efficiency is to have each man in the organization as well-trained as his capacities permit. A well-trained man is a valuable asset to the business. Not only does he himself produce a greater output, and perhaps of better quality, but the overhead charge is reduced, since a larger output is obtained from each machine, and the upkeep of the equipment can be maintained with less expenditure of time and money.

Research.—In industrial enterprizes operating under scientific management, and making use of time and motion studies, a personnel department should be charged with the duty of making the job analyses required, along with any other technical analyses necessary, such as the study of fatigue. A trained staff is required to do this work, and such a staff can best be administered under the personnel department, for new methods can only be introduced effectively if the coöperation of the men is secured. A hostile attitude of the workers will defeat scientific progress. Studies of labor turnover, absenteeism, the efficiency of individual workers, the efficiency of various production methods, and similar matters, can claim the attention of the research experts.

Employees' Service.—Plants maintaining athletic activities, musical activities, restaurants, and other agencies of employees' service are constantly increasing in number. The chief advantage of this type of work is in building up a unity of morale—an *esprit de corps*—among the workers of the plant. There is always a danger that workmen will misunderstand the purpose of these service activities. Often, as a matter of fact, suspicion is justified; for frequently these activities are established by the management solely with the purpose of reducing unrest in the plant. At a certain plant in a textile district, the opening of a country club in a nearby suburb, with swimming pool, tennis, and general recreational facilities, was very much opposed by the workmen. Today, if that same company sought to remove the country club, it would probably find a strike on its hands. The idea has been completely "sold" to the workers. They help to support the country club, attend it in large numbers, and are very

proud to talk about it to their friends outside the plant. The success of the enterprize was the natural result of a sincere purpose on the part of the management to promote friendly relations in the plant. Other plants could be found in which years of effort to build up service activities have failed to eliminate hostility on the part of the workmen. The service division must be a coöperative enterprize of the management and the employees. If it is paternalistic in nature, it fails in achieving its purpose.

Plant Morale.—Several times in the foregoing discussion we have called attention to the need for care in maintaining a correct mental attitude on the part of the workmen towards the management. Maintaining the morale in the plant is the most important single function of the personnel administrator and his department. If he succeeds in building up cooperation and understanding between the management and the employees, the department's activities will be a success, almost in spite of any other defects its plans may contain. On the other hand, the finest possible system of employment, health and safety, production, education, research, and employees' service will fail disastrously if hostility, suspicion, and antagonism remain in the worker's mind. The best way to protect the department against the breaking down of morale is to introduce innovations slowly, making sure at each step that the workman understands and sympathizes with what is being done. In the textile plant mentioned above, the individual in charge of systematizing the technical work of the plant made a practice of never entering a new department without the foreman or department head first requesting that the systematizer come in and see what he could accomplish. No new step was made, consequently, until the systematizer was on friendly terms with the individuals who might object to the new methods. A personal contact was in all cases built up before any new step was taken. It took, on this basis, several years to get around the whole plant, but the job was accomplished in a spirit of good will and coöperation. The management must recognize that it is dealing with human beings, who, with all their splendid traits, are really to a great degree creatures of instinct and habit. Many of the basic human traits, such as parental love, workmanship, association, love of beauty, and pride of ownership, are important factors in the proper handling of men.

Summary

Responsibility for the heavy economic loss suffered from waste in industry is to be charged mainly against management. By the application of scientific methods in management, first advocated by Frederick W. Taylor, much of this waste can be eliminated.

The scientifically managed enterprize should be located in the best situation with reference to raw materials, power, markets, labor supply,

climate, transportation, and the like. Its building should be of modern construction, fire-proof, well-lighted, and adapted to the work it must do. The plant organization should usually be of the line-and-staff type, which combines the military type, in which a hierarchy of authority descends from the highest executive down to the individual worker, with the functional type, in which a number of parallel executives direct various phases of the business. Each job should be scientifically analyzed to discover the best method of performing it. Workers should be taught this method and their coöperation secured by giving them a share in the savings which result. This permits wages to be increased without raising labor cost. Wages may be paid by the time or by the piece. The best methods, such as the Halsey and Rowan Premium Plans, combine these,—a bonus above time wages is paid for completing the work assigned in less than the average time. Similar is the Taylor task and bonus system, which allots a bonus to the worker if he completes the job within the standard time set. The development of experimentation and research is an essential part of true scientific management.

Increasing attention to the human problems of industry has led to the adoption of personnel departments headed by personnel administrators in progressive plants. Their function is to increase efficiency by more careful attention to employees' needs and morale. This involves scientific employment of workers based on job specifications, cultivation of suitable sources of labor supply, and the effective interviewing and testing of applicants. The personnel department must also take care of transfers, promotions, and discharges and maintain facilities for health and safety, education, research, recreation, employees' representation and the like. On the personnel department must fall the burden of maintaining high plant morale and a spirit of coöperation between men and management.

SUGGESTIONS FOR FURTHER READING

All students of scientific management should read the three chief works of Frederick W. Taylor, *Shop Management* (1911); *The Art of Cutting Metals,* presidential address before the American Society of Mechanical Engineers, December 1906; and *Principles of Scientific Management* (1919). Those who wish an excellent detailed treatment of the best practice in industrial management today should read Richard H. Lansburgh's *Industrial Management* (1928). Material has been drawn liberally from Professor Lansburgh's text, especially in Part B of this chapter. In *The Taylor System in Franklin Management* by George D. Babcock (1918) will be found an interesting description of the introduction and operation of scientific management in the H. H. Franklin Manufacturing Company. Two very comprehensive collections of significant articles on scientific management are Clarence B. Thompson's *Scientific Management* (1914), and The Taylor Society's *Scientific Management in American Industry* (1929). For an interesting short interpretation see Dale Yoder, *Labor Economics and Labor*

Problems (1933), Chap. XIX. A short vigorous critical analysis of scientific management is J. A. Hobson, *Work and Wealth* (1921), Chap. XIV.

Liberal use has been made of *Personnel Administration* (1933) by Messrs. Tead and Metcalf in writing the section on personnel administration. The book of Professor Lansburgh above noted contains a brief discussion of personnel administration in Part VI. The May 1925 issue of the *Annals of the American Academy of Political and Social Science,* entitled *Science in Modern Industry,* gives a very useful set of articles on both scientific management and personnel research. The student will also find useful the excellent works of W. D. Scott, R. C. Clothier, and S. B. Mathewson, *Personnel Management, Principles, Practice, and Point of View* (1931), and F. E. Baridon and E. H. Loomis, *Personnel Problems* (1931). *Personnel and Labor Relations* (1938) by Dale Yoder is very well done and somewhat broader in scope than the other books here listed.

CHAPTER V

THE INTEGRATION OF INDUSTRY

A. Technical Influences Towards Integration

The Problems of Integration.—It is extremely important that industry be organized in the most effective manner if the agents of production are to be utilized to the limit of their capacities with a minimum of waste. Constant battling with industrial waste and inefficiency has brought about a succession of technical developments that have carried with them a gradual increase in the size of the typical business enterprize. There has been an integration of industry—*that is, a concentration in one organization of functions which previously have been carried on separately by various independent enterprizes.* This movement holds important possibilities for good or evil in the future, and our study of the problem of increasing economic welfare would be lacking if we did not pass on the merits and dangers to be faced in this direction. The problem gives rise to three questions: (1) What are the technical influences at work, and what are their advantages and disadvantages? (2) How have these technical influences affected the form of business organization? (3) How has the control of industrial activity been affected? Such an analysis should establish a factual basis for determining what should be our future policy toward increased industrial integration.

The Influence of Specialization.—In Chapter II, we discussed the development of specialization in industry. This development has increased marvelously the efficiency of industry, but at the same time it has had the effect of constantly increasing the size of the business unit, since only thru increasing the output—that is, producing on an ever larger scale—can specialization advance. If a worker's only task is the attaching of the heel to the upper part of a shoe, or if a costly machine will complete only a small step in the manufacturing process, then the factory must be in a position to manufacture and sell a quantity of shoes large enough to keep both workmen and machinery constantly busy at their specialized work. Every extension of specialization carries with it a strong pressure towards an increase in the size of the operating business unit.

Standardization.—The aim of specialization is to divide industrial

operations into as many small routine tasks as possible. The workmen and the machines constantly repeat one simple operation. A combination of all the specialized work produces the finished product. If there is to be a successful conjuncture of the work of all the specialists, each task must be carried out in an absolutely uniform manner. This means standardization of the work of the specialist, of the machines utilized, and of the finished product. If one man makes a heel and another man the upper part of the shoe, then the size of both parts must be standardized carefully if they are always to fit together correctly. The machine doing a routine, standardized operation must itself be standardized if maximum efficiency is to be acquired. A sewing room in a shoe factory could not efficiently operate with each machine different in construction and operation from every other machine. All should be exactly alike with interchangeable parts, so that a break-down can readily be repaired with a standardized part and a minimum of required mechanical skill. This, when carried to the limit, requires that the machines that make the parts of other machines, must themselves be standardized, if the parts produced are to be absolutely uniform and interchangeable. Finally, the finished product itself, in the interest of efficiency, is being standardized. If shoes were produced in unlimited varieties according to the whim of the consumer, the output of each type would be small and little use could be made of either specialized workmen or machinery. Standardization of the product to a few varieties is advantageous in large-scale operations. Often it is possible to make several varieties and in such a way that each one is composed, to a large measure, of the same standardized parts. Thus, it is possible to make four-, six-, or eight-cylinder motor engines and yet have most of the parts of the three types interchangeable.

Standardization admittedly carries with it some disadvantages. Workmen frequently are reduced to unskilled machinery tenders, and the old craftsmanship spirit is to a great degree lost. Unions have looked with disfavor upon the increasing of standardization. Then, too, consumers rebel at uniformity, demanding variety in the commodities purchased. Perhaps, however, both of these disadvantages, the monotonous unskilled work and the lack of variety, have been overemphasized. Many industrial leaders who are in a position to know assert that, for the bulk of workers, the simple routine job is not monotonous but desirable, and work requiring mental effort and responsibility is so shunned that often a real problem of obtaining workers for promotion exists.[1] It is also possible that the variety of commodities, such as clothing, has been much increased for the average person rather than decreased by the use of standardization. The cheapening of products has widened the scope of possible consumption, and the man of small means has undoubtedly a

[1] Henry Ford, *My Life and Work* (1923), pp. 103 and 106.

much larger variety to select from; he can have in his own stock a much larger diversity than would ever be possible under the handicraft system.

Standardization is the second powerful influence driving towards an increase in the size of the business unit. The larger the business, the wider the market possible, the greater the stability achieved, and the less the pressure of competition. Industrial efficiency is unquestionably increased by standardization.

Uniform and Continuous Processes.—There are many industries in which the raw material is of a very homogeneous character, and the course of production from raw material to finished product is one uniform and continuous process. This is especially true where the raw material is in a powder or liquid form. In the manufacture of paper the wood fiber is reduced to a liquid form and, under an automatic process requiring no touch of human hands to the raw material, it passes thru a sequence of operations, including a series of rollers, coming out as finished paper at the end. The milling of wheat and the refining of crude petroleum are further illustrations of continuous uniform processes.

There are other industries using raw material, which, while not in liquid or powder form, is nevertheless of so homogeneous a character that uniform and continuous treatment is possible as the material proceeds thru the various stages of production. Meat-packing is such an industry. Every animal is slightly different, but the numerous operations, from the administering of the fatal blow which kills the animal, to the last operation on the dressed meat and by-products, are continuous and uniform for each animal slaughtered. The large packers of Chicago have worked out a system of production to such a fine degree that the carcass never ceases to be in motion as it passes from specialist to specialist. Under such conditions the use of a high degree of specialization, automatic machinery, and the tremendous economy in buying raw materials of a homogeneous nature on a large scale, give a very decided advantage to the large plant over the small. Small-scale production would be unusually wasteful and inefficient. The force of this can readily be appreciated when one compares these industries with other types such as assembling industries. In the manufacture of clothing, for example, the raw material, cloth, thread, and various trimming materials are not homogeneous, and the final act of manufacture is really a cutting and assembling process. This is, in part, the explanation of the tendency for the small producer to hang on in competition with the large in the clothing industry.

Waste in Competition.—We observed in Chapter II that some of the waste in industry could be attributed to defects arising out of the competitive system. The waste of competition in the duplication of advertizing and selling effort, the necessity of keeping up a fighting front, and the duplication of plant equipment, lay heavy toll on the output of in-

dustry. The pressure of competition becomes especially dangerous when an industry has a very large capital investment in the form of buildings, expensive machinery, and other fixed capital, since failure to keep a steady sale of product in the open market means that a heavy overhead cost burden must be shouldered by the business. The desire to avoid this overhead burden is responsible for no little of the present-day large-scale competitive advertizing, for each industry seeks at all cost to protect the stability of its market. In seeking to avoid the waste of competition, the development of large business units, thru the utilization of various forms of combination, has gained a good deal of its momentum. As long as private enterprize continues, waste of competition can be best eliminated thru combination.

Other Technical Influences.—The development of expensive mechanical equipment requires the possession of large capital resources on the part of an enterprizer engaging in production in an industry operating on a large-scale, standardized basis. The difficulty of acquiring the necessary capital gives an advantage to the large concerns, for their borrowing capacity is greater and the rate of interest charged them is usually lower. The technical organization for financing industry is better adapted to financing a large concern than a small one. The power requirements of the machine process are also great, and this tends to localize an industry where power resources are extensive and cheap, thus adding a strong influence towards centralization. The desire to obtain stability of markets, steady flow of raw material and service supplies, and the general adjustment of demand for a product to its supply, are other powerful influences tending towards the development of larger business units. These factors have all evolved out of actual experience in the conduct of industry.

Tendencies Towards Decentralization.—The evidence so far presents what appears to be an irresistible tendency towards integration in industry. There are, however, technical influences towards decentralization that must be noted. It has been found in many industries that, in a given state of the arts, a technical limit is reached at which it is unprofitable further to increase the use of specialized machinery and labor. It becomes more profitable to duplicate producing units than continually to increase the size of one unit. This has been especially true in the production of textiles. Up to a certain point, increased use of machinery and standardization bring decided economies, but a point is quickly reached at which a small mill can compete successfully with the large. The machinery used is in relatively small units, such as a weaving loom, and an increase in the size of the business does not bring into use larger and most costly looms, but rather a larger *number* of looms. Machinery tends to be duplicated, rather than enlarged. Labor, technically trained, plays a more important part. In the field of textile production, numerous small

mills, especially silk mills, are found scattered all over the eastern and southern parts of the United States, competing with the large concerns. Passing on to the stage of clothing manufacture, the small shop, occupying floor space in the loft of a city building, can specialize in men's shirts or some other similar product, and operate successfully. In agriculture, the technically-most-satisfactory-size farm appears to be reached very early. The use of better plows, tractors, fertilizers, and technically trained men is profitable, but the farmer quickly finds there is a limit, under the existing conditions, beyond which he cannot successfully operate on a large scale. The small farmer seems to survive the world over.

A second influence tending towards decentralization is the standardization of parts. Once the numerous parts entering into a product are standardized, such as the parts of an automobile, a small producer can frequently concentrate on the manufacture of one of those standardized parts and operate more cheaply than would be possible if each of the concerns involved sought to produce all required parts themselves. Henry Ford is at present working out such decentralization within his own business. Certain phases of the work are being taken away from the main plant and produced in separate plants some distance away. Mr. Ford is very emphatic in his belief that large-scale production and standardization do not necessarily mean large concentrations within a single plant. He believes the future tendency will be towards decentralization in the production of the specialized parts, each one itself produced on a large-scale basis.

Specialization and Integration of Management and Marketing.—While the technically-most-efficient-size unit may set limits to further development of large-scale production within a plant, it has been found profitable to extend the principle into *large-scale management* of different plants. By having an organization of specialists concentrating on the many different aspects of management, economies may be obtained that are not possible in a small enterprize. Thus in the chain store the economy of having a local grocery store connected and managed with hundreds of others, shows itself, not in economies obtained by the use of machinery and specialized labor within a store, but in the economies achieved thru specialization in management. For example, advertizing experts can be employed and the advertizing for the entire chain of stores can be conducted as a single unit.

In the marketing of products groups of specialists have developed, such as wholesale dealers, commission merchants, and large produce exchanges, each specializing in some phase of a marketing problem. Once a combination of competitors is established, the need for the individual specialists ceases. A large manufacturing concern can act as its own wholesaler, dispensing with middlemen; the functions they performed can be

more efficiently performed within the new organization. When the oil and steel trusts were formed, the oil and steel exchanges practically passed out of existence. The big trust can have within its organization its own specialists in the various phases of marketing.

B. The Influence of Integration on the Form of Business Organization

Evolution of the Form of Business Organization.—The growth of integration brought with it a need for new forms of business organization. Such simple business units as individual enterprizers or partnerships could hardly meet the financial and legal requirements of large-scale industry. So there were evolved the large corporations and combinations now so familiar to all of us. In the present section we shall trace the growth of these great organizations. We shall find that, while they have made possible the technical advantages of integration, they have brought with them monopoly problems which give grounds for some concern.

The development of the modern type of business organization really started with the legal sanction given to limited liability. As long as a man was responsible to the full extent of his private wealth for the debts of a business enterprize, one could hardly expect a very extensive development of large-scale industries financed by a pooling of the resources of many separate individuals. Each individual under such conditions has too much at stake to trust the honesty and ability of other persons associated with him. Once it was possible for one to invest a small sum of money in a business and risk only the loss of that investment in case of failure, it was possible to accumulate the savings of small investors in large pools. The issuing of stocks and bonds permits an individual to invest any sum which he may desire. The development of the corporation, or joint stock company, as it is called abroad, satisfied this need for a business enterprize with limited liability. A corporation is an association of individuals (either natural persons or other corporations), acting, under a charter from the state, as a single person in the conduct of an enterprize. The corporation is the creature of the law, has a separate existence from that of the individuals who compose it, and can operate in much the same way as a natural person, owning property, conducting suits, making contracts, and carrying on similar activities. Each individual owner is responsible only for the amount of the investment he himself puts in the business, thru the purchase of stocks or bonds, except under certain special circumstances. In some states ownership of bank stock, and stock of other specified corporations, carries double liability, but this practice is declining. With the demand for still larger forms of business organization, the cor-

poration has been evolved into larger aggregations of capital, and has taken many different forms. Sometimes the original corporation simply grows larger and larger without much reorganization, as in the case of the Ford Motor Company. The more usual way, however, is thru combinations and mergers with other corporations.

The Combination.—Following the American Civil War, there began a movement towards the combination of competing corporations.

The Pool.—At first the method used to effect combination was the formation of what is called a pool. The railroads of the United States have made the most use of this particular form of organization. Competing lines entered into agreements to eliminate competition and to work together as far as possible. Sometimes the profits were placed in a general pool and each company drew its share out of the total according to some previously agreed percentage. At other times the tonnage carried was pooled, each company agreeing to handle a fixed percentage of the general traffic. In some cases the pooling companies divided up the territory to be served. The passage of the Interstate Commerce Act in 1887 made railroad pools illegal. Somewhat later an interesting type of pool developed known as the patent pool. Competing firms combined all their trade patents in a joint-use pooling agreement. In 1896 the General Electric Company and the Westinghouse Company, controlling approximately ninety per cent of the manufacture of electrical supplies, formed such a pool. On the whole, pools do not appear to have proven a very efficient form of combination. The opportunities for fraud and the possibilities of individual members breaking the agreement were too numerous to make the power of the pool very effective. However, there were some outstanding cases of great success.

The Trust in the Technical Sense.—The Standard Oil Company was the first to make successful use of the technical trust as a form of business combination. Under this form a board of trustees was selected to act for the industry. Each of the competing companies entering into the combination turned over the majority of its stock to the board of trustees and received in return trust certificates. This placed the control of the industry in the hands of a small group of men, since by holding the majority of the stock in the formerly competing corporations, the board of trustees possessed the power necessary to operate them as a unit. The big advantage gained was that the trust was not an incorporated body under statute law, but was simply a private organization, formed by extending the common law trust principle to business enterprize. For a time this form of combination flourished, especially in the case of the Standard Oil Company, where six or seven men, admittedly one of the most brilliant groups of industrial leaders American industry has produced, built up an organization that carried in the palm of its hand the American oil in-

dustry. Its life, however, was short, for the courts declared it an illegal extension of the common law principle.

The Holding Company.—In search of a legal and effective form of combination the holding company was next resorted to. It will be noted that the pool and the trust were rather loose forms of combination, each business retaining its identity and individuality of operation. This situation changes with the holding company. Corporations seeking to combine secure a charter from the state, empowering the establishment of a new, separate corporation, having for its specific purpose the holding of stock of other corporations. The competing corporations turn over a majority of their stock to the holding company and receive its stock in return. The organization resulting is about the same as the original trust, except that its legal status is secured thru the incorporation of the combination; it is the creature of the sovereign power of the state. Today the holding company is very extensively used and is a legal form of organization, providing it does not unduly restrain competition in industry. A discussion of this question of legality and social policy we must postpone to a later chapter. Many of the large corporations in America today are to some extent holding companies; that is, they are part owners of other corporations thru the holding of stock certificates therein.

The Super-Corporation.—During the last quarter century many new combinations have been effected by completely eliminating the old independent companies and establishing new super-corporations. Sometimes several corporations join together, each giving up its own charter and losing its identity in the new corporation. In this case a merger is said to have taken place, the several companies having merged their identity into one. In other cases one company buys another. A permanent and effective combination is thereby secured. Corporations, such as the United States Steel Corporation, frequently represent the blending of the holding company with the super-corporation idea. The United States Steel Corporation, at the beginning of its career, bought outright many companies entering into the new enterprize, and since then, as a holding company, it has secured control of other corporations thru purchase of the majority of the voting stock. Some of the corporations going into such a combination lose their identity completely, while others do not. The General Motors Corporation even goes so far as to permit a certain measure of competition between the separate factories producing different makes of cars, on the theory that by so doing it prevents the organization from losing the vigor and strength that goes with a young competitive industry.[2]

Some Loose Forms of Combination.—Of late there has been some

[2] See C. C. Edmonds, *Tendencies in the Automobile Industry*, in *The American Economic Review*, September 1923, p. 428.

reversion to the loose types of combination represented by the early pools and working agreements. The two most prominent experiments in this direction are the marketing coöperatives in agricultural districts, and the trade associations in industrial areas. These organizations are developing in spite of the existence of a high degree of competition. The marketing coöperative is rather unique. The organization is permanent in character, and open and above board in its policies. Each producer entering into it agrees to market his output thru the central office, or, if he fails to do so, to pay a penalty for each unit of output sold outside. No official control over the individual producer's output is exercized. It has been charged that these organizations do seek to control the output somewhat, but such is not their avowed purpose. They seek to market the output as a unit, establishing brands that can be nationally advertized. For example, "Sunkist" oranges are the product of a coöperative California Fruit Growers Association. Such associations grade the product and endeavor to establish a uniform stable price, by feeding it in a steady flow to the market.

The trade associations are somewhat looser in organization and less permanent in character than the marketing coöperatives. "The distinguishing earmark of the trade association movement is that it seeks, thru voluntary coöperation, so to organize the conduct of trade and industry, within the competitive system and on the basis of maintaining the essential independence of the associates, as to render the business enterprize more efficient and orderly."[3] A trade association can perform many useful services in an industry comprizing numerous small, independent, competing producers. An interchange of trade knowledge can be facilitated, especially thru the establishment of a trade journal. A central research bureau can be maintained, with laboratory facilities for experimental research that would be utterly impossible for any one small producer to keep up. National advertizing can be operated thru the central bureau. The industry takes on a stability thru publicity of facts as to current prices, orders taken and delivered, stock on hand, and similar valuable trade information. Many trade associations have made really sincere efforts to establish a higher code of ethics in the trade, and they campaign vigorously to that end. Should the trade come under suspicion by the public authorities, the trade association can represent the industry before the governmental bodies and see to it that its side of the case is fairly presented. Obviously, in such an organization there is danger of abuses. It is said that price control becomes the primary purpose, and that the organization becomes one in restraint of trade in the course of its practical operations. This is still, however, a mooted question. Typical examples of trade associations

[3] I. L. Sharfman, *The Trade Association Movement*, in *The American Economic Review*, Supplement, March 1926, pp. 204–205.

are the Cement Manufacturers Protective Association and the Hardwood Lumber Manufacturers Association. The trade association movement holds out promise of increasing the efficiency of production in industries in which many of the wasteful practices inherent in competition could not otherwise be removed because the usual forms of combination appear difficult, if not impossible of formation. The National Industrial Recovery Act of 1933 placed the stamp of federal approval and support upon the trade association by utilizing this form of organization as the very basis of the recovery program. This policy gave the trade association movement remarkable impetus and is likely to have important permanent effects upon the organization of American industry.[4]

Types of Integration.—We have defined the integration of industry as the concentration in one organization of functions which have previously been carried out separately by various specialists. This concentration of the business unit takes place in three different directions—vertically, horizontally, and laterally. Vertical integration of industry means the placing of several, or all, of the stages of production, from the acquisition of the raw material down to the marketing of the final finished product, under a single organization. Horizontal integration is the combining of numerous establishments operating in the same stage of production, such as the combining of a number of grocery stores under one organization. Lateral integration is the combining under one organization of many industrial establishments producing various commodities having but slight connection, if any, with the main product. Usually an industry spreads out laterally thru seeking to utilize by-products created in the course of production.

Vertical Integration Illustrated.—The best illustration of vertical integration is that presented by the steel industry. Producers of steel are handling great masses of metal raised to a very high temperature, and the practice of cooling the metal at one stage, carrying it some distance by rail, and reheating for the next stage, is a costly one. The economical method is to carry thru the processes in quick succession without reheating more than is necessary. The way the steel industry has spread out is very vividly told in the following quotation:[5] "We are producers of coals; we have got modern collieries, thoroly equipped to take a full share in the prosperity which will come about when the horrid coal control finishes. . . . Passing from coal, my friend, Mr. Whitwell, is in charge of the next stage in the ladder, namely, pig-iron—bar iron—leading on to steel works which we hope to acquire, and for which we are at present in very close negotiation. Then we pass on to our ship-

[4] This act is more fully discussed in Chapter XIV, Part C and Chapter XXVI, Part A.

[5] Cited from *The Economist*, October 25, 1919, in D. H. Robertson, *The Control of Industry* (1923), p. 33.

building yard, where the steel will be readily absorbed, and I can say this truthfully, that at the present moment we are suffering in our output chiefly on account of the lack of raw material. It is very essential, therefore, that we should secure our own steel works with the least possible delay. . . . Turning from the shipbuilding yard we pass on to ship-owning, and in carrying on and supporting our ship-owning we are building up a very large coal-exporting business and a timber-importing business. Mr. Whitwell, at his iron works, requires our ships to bring back the iron ore to keep his blast-furnaces going. We pass on to marine insurance, and in this connection we are closely associated with Lloyd's. There is not a string that we are neglecting in this great aspiration of ours that we should be self-contained, and be able to carry on the business in such a way that in cycles of depression and prosperity it will give a regular dividend to the shareholders and secure their principal."

Horizontal Integration Illustrated.—The most common form of horizontal integration is the chain store. The Great Atlantic and Pacific Tea Company, retailing food products, has hundreds of retail stores thruout the United States. The Whiskey Trust and the Sugar Trust, the first primarily a combination of distilleries, and the second a combination of refineries, were examples of horizontal integration. Railroad consolidations are further illustrations. There is a decided tendency for the horizontally integrated industry later to press back towards the raw material or forward towards the marketing stage. Many of the chain stores are opening canneries, and the Sugar Trust seeks control of sugar lands in order to guarantee sources of raw material.

Lateral Integration Illustrated.—The development of the meat-packing industry in the United States is a striking illustration of an industry spreading out into fields not directly connected with its primary purpose of production. The four big packers, Armour, Cudahy, Swift, and Wilson, own and control railroads, high-speed electric lines, land development companies, printing houses, rendering companies, cotton-oil companies, newspapers, magazines, railroad terminal facilities, banks, packers' machinery and supply companies, cold storage plants, warehouses, canning companies, and slaughtering companies.[6] The actual products produced by these packers, as listed by the Federal Trade Commission, number over six hundred, and the Commission states that the list is far from complete as to the products of subsidiary and allied companies. Commodities in the list vary from bearings for railroad cars to condensed milk. Industries are often led into lateral fields of production thru the medium of their by-products. The tendency is illustrated nicely by the General Motors Corporation's purchase of the Delco Company. This

[6] Report of the Federal Trade Commission on the meat-packing industry. Summary in Part I (June 24, 1919). See especially the chart opposite p. 46.

company was a large producer of automobile electrical equipment, but at the same time produced one of the most widely used systems for farm lighting. The automobile corporation thus found itself in the business of supplying farm-lighting equipment. The chemical industries, especially the Du Pont companies in the United States, have spread out laterally thru seeking uses for their numerous by-products.

The Extent of Concentration in American Industry.[7]—An examination of present-day business organization discloses an amazing degree of concentration in practically all lines of industrial activity. The trend is very evident in the exploitation of natural resources. Nearly four-fifths of the recoverable tonnage of anthracite coal is controlled by eight companies, all closely affiliated with railroads. The United States Steel Corporation controls from one-half to three-quarters of the iron ore reserves and about two-fifths of the industry's steel-making capacity; two corporations control some fifty-two per cent of the steel capacity and nine over eighty per cent. In copper four companies control nearly one-half of the ore reserves and one company, The International Nickel Company, owns more than ninety per cent of the known nickel resources of the world. The Aluminum Company of America dominates the domestic market for that product by its ownership of bauxite deposits, used in the manufacture of aluminum. Five companies including two members of the old Standard Oil group produce about thirty-five per cent of the total American oil output.

In manufacturing, while the situation is more diverse, the merger movement has advanced with remarkable speed since the World War, with over seven thousand mergers during the period 1919 to 1928. General Motors and Ford sell nearly three-quarters of the motor cars sold each year. Two packers handle over fifty per cent of the meat entering into interstate commerce. Over seventy per cent of the cigarette trade is controlled by three companies. The General Electric and Westinghouse manufacture more than one-half of the equipment for the electrical industry. The trend is noticeable in chemicals, textiles, shoes, and rubber, but to a much less degree.

The greatest concentration is found in the public-utility fields; electric light, electric power, and gas.[8] Today ten great holding-company systems do approximately three-quarters of the entire electric light and power business of the nation. The situation in gas is similar with sixteen holding-company systems (most of which also do an electric business) controlling about forty-five per cent of the gas output of the country. The American

[7] Unless otherwise indicated, the material in this paragraph was adapted from Harry W. Laidler, *Concentration of Control In American Industry* (1931), pp. 436–442.

[8] Material on Public Utilities from J. C. Bonbright and G. C. Means, *The Holding Company* (1932), p. 91.

Telephone and Telegraph Company dominates all but a small fraction of the telephone industry.

A Danger of Integration: Monopoly and the Formation of Trusts.—The swift current of integration and combination carried many industries along to the point of monopoly in their particular fields. By monopoly is meant the single control of the sources of supply of a commodity. Few monopolies are so perfect as to obtain exclusive control, but the larger a business enterprize becomes, the closer it is possible to approach that unity of control which gives monopoly power. One authority has suggested that the emphasis should be placed upon big business rather than upon monopolies as such, for "the increasing size of the units has so far enforced a reduction of their number in most fields of production as to preclude that spontaneous marginal adjustment of supply and demand, thru the independent action of numerous producers in various lines of trade, which real competition requires."[9] Popular usage has extended the meaning of the term "trust" to something more than the technical device for effecting combinations of competing concerns described above. The term has come to cover any business organization, regardless of its form, which owns or controls enough of the productive facilities for a given commodity or service substantially to control its market price. The essential characteristic of a modern trust is its monopoly power. Just what proportion of the total output a trust need command in order to control the price of its product cannot be exactly stated, but it falls far short of complete domination.

Reasons for the Growth of Trusts.—The phenomenal growth of trusts has been attributed to five major causes: (1) the desire to eliminate destructive competition; (2) the desire to extend large-scale production methods to the greatest possible limits; (3) the hope of securing monopoly profits; (4) the desire to secure the profits of promotion; and (5) sheer love of power. While the industrial leaders controlling trusts have usually represented the economies of large-scale production as the principal cause for their existence in order to win over popular support, it is probably the least important of the five reasons. The most important single cause, in the opinion of most authorities, is the desire to secure monopoly profits thru the ability of the new combination to control prices. The desire to eliminate competition probably ranks second in importance. Many trust organizers asserted that cut-throat competition forced the establishment of their enterprizes, but careful analysis of the formative period of many of our larger combinations indicates that the danger of cut-throat competition has been grossly exaggerated. The advantages of eliminating competition rest rather in the reduction of selling costs and the protection

[9] Myron W. Watkins, *Trustification and Economic Theory, American Economic Review Supplement,* March 1931, p. 58.

of the trust while it is forcing upward the price of its product. The profits of promotion no doubt had much to do with the establishment of many trusts. In many cases the promoter accepted stock in the new corporation, and consequently his return depended on the market value of the securities after they were issued. Mr. Havemeyer is said to have received ten million dollars in common stock on the formation of the sugar trust.[10] In some cases, where the consolidation did not prove successful, the promoters' profits failed to materialize.

The Advantages of Trust Formation.—There are technical advantages that go with monopoly power that in part justify the creation of trusts. First, large-scale production can be carried to the limit and low cost thereby achieved. The appalling waste of competition can be avoided; duplication of plant, advertizing effort, and selling effort can be eliminated. The variety of products may be reduced because competing brands are not needed and standardization is further developed. Cross freights can be prevented. An order sent to a large combination for the purchase of its product can be filled by the producing unit nearest the customer, rather than by the unit to which he may have happened to apply, thus avoiding unnecessary freight costs. Secondly, the trust can stabilize the demand and supply for its product. Irregular production is costly; and as the trust controls the field, it can maintain steady production thruout the year, since its control enables it to estimate accurately just what the year's demand will be and its relation to the existing productive capacities. The extreme importance of this is shown by a comparison of anthracite coal and iron production methods in the United States with those of petroleum and bituminous coal production. Thirdly, new inventions and new methods can be adopted thruout an industry without restriction, thus making possible complete utilization of such improvements at an early date.

The Abuse of Trust Power.—There are disadvantages, however, that must be considered. The ability to manage large enterprizes is not overabundant and numerous failures have occurred which are attributable to faulty management. There is also danger of stagnation, once the invigorating stimulus of competition is lost. The employees, from the highest official down to the lowest paid workman, feel less spurred to produce to their utmost.

Far more serious, however, are the abuses of trust power. Chief among these are the maintenance of abnormally high prices, the use of unfair methods of competition, and the corruption of public authorities. The problem of monopoly price control will be discussed in Chapter XII. We will learn there, that while there are definite limitations on the monopo-

[10] Eliot Jones, *The Trust Problem in the United States* (1922), p. 98.

list's power to raise prices, there is a wide range within which his power is effective enough to result in the exploitation of the general public.

Unfair competition affects primarily the business of competitors, but indirectly the general public is also concerned. A reading of the indictment of any of the large trusts written at the time of suit for dissolution, gives ample evidence of how far a business enterprize will go along such lines. Unfair competition has taken many forms. Trusts frequently have maintained different prices for the same product in different localities for the purpose of eliminating local competing firms. Where competition is keen, the price is kept low, the loss being made up by charging high prices where competition is slight or non-existent. This practice was followed extensively by the Standard Oil Company. Powerful trusts have also succeeded in forcing railroads to grant them lower freight rates, in the form of rebates. By threatening not to use a given railroad, the trust could demand lower freight rates than those charged for carrying the freight of its competitors. The railroad rebate problem was one of the most serious of all those connected with the development of railroads in the United States. The Standard Oil Company at one time received not only a much lower rate than its competitors, but was also allowed a rebate on part of the freight actually paid by them. Another difficulty is that dealers have frequently been required to handle only the products of the trust. Since competing firms were usually smaller in size and did not produce a full line of products, the dealer was forced, by such an agreement, to handle the products of the trust exclusively, or carry an incomplete line of goods. This "full-line" forcing was for a time the accepted practice of the International Harvester Company in doing business with its local dealers. Again, some trust officials did not hesitate to stoop to espionage and intimidation of their competitors if they believed desired results could be obtained in that manner. Employees were bribed to reveal information, railroad employees were induced to disclose the shipments of competitors, dealers and salesmen were threatened, and similar tactics were made use of, even to the extent of criminal activity in some cases. Finally, the use of "fighting brands" has been quite common, especially in the tobacco industry. Trusts have imitated the best selling product of a competitor and sold the imitations at very low prices in order to discredit the competitors' product. Often the make-up of the package, coloring, etc. were copied and a name selected very similar to that of the competing brand. These "knockers" were usually removed from the market, once they had served their purpose by eliminating competition.

The danger of political corruption grows out of the attempt of the trusts to stave off government regulation. The development of party or-

ganization, necessary to the nomination of candidates under our form of government, requires the expenditure of large sums of money, and the candidates, once elected, tend to follow policies which will satisfy the wishes of their financial backers rather than those of the voters who put them in office. The large corporations found that the making of heavy contributions to political parties gave them a lever of control that was useful, once the candidates supported were in office. A pernicious influence pervades politics where such practices are permitted, and as trusts grow in size and power, and the expense of public elections mounts, this danger becomes increasingly acute. Congressional investigation of the Senatorial election in Pennsylvania in 1926 indicated that several millions of dollars were spent by the candidates for the office of senator, altho the position pays but a few thousand dollars a year. This problem is one of the most serious now facing our democratic form of government.

C. The Financial Control of Industry

Specialization in Finance.—The financial requirements of a business organization may be divided into four distinct parts: the organization and promotion of the enterprize, the underwriting of the enterprize, the provision of permanent fixed capital, and the assurance of a steady flow of working or circulating capital sufficient to meet daily needs. Parallel with the development of specialization and large-scale production in material production, there has developed specialization and large-scale operation in these four phases of the financing of enterprizes. An elaborate system of promoters, bankers, brokers, and security exchanges has grown up, carrying specialization in finance to an advanced stage. This development has had a profound effect on the course of industry.

The Rôle of the Promoter.—Some one must take the initiative in starting any new business enterprize, or in bringing together into a combination, already existing businesses. Frequently the new step is taken by the business men already actively engaged in the industry that is "ripe" for a change, but this burden is more and more being shifted to the shoulders of a group of specialists, in the form of professional promoters. "He [the professional promoter] makes it his business to study ways in which new inventions, new methods of production, new developments of demand, or new facilities for transport, offer opportunities for profitable alliances between industries that have had little in common as yet. He watches the waste of competition between rivals; and, being detached from the details, he is generally able to take a broader view of fundamentals and to discover their true relations and proportions better than those whose energies are chiefly occupied with practical work in their several lines."[11] Once the promoter has decided in his own mind

[11] Alfred Marshall, *Industry and Trade* (1919), p. 330.

on the advisability of a new corporation or combination, he must secure the consent of the individuals or corporations involved in the proposed enterprize. This obtained, he is ready to face the banker, placing before him the details of his project, and seeking the funds necessary to its flotation. After the enterprize has been launched, the promoter's part is done. He may be paid for his services in cash, or, more probably, he may secure a block of stock in the new enterprize. Whatever the method of payment, the promoter usually gives up his control, selling his stock, since he is primarily interested in starting new ventures and not in maintaining old ones. There are cases where the promoter becomes interested in the business and permanently affiliates himself with it, but this is not the common practice. The promoter is a pioneer, and when pioneering days are over, he goes on to new territory. While he plays an important part in industry and has a recognized place, the evils that grow out of the abuses of his position have brought suspicion on the whole practice of promotion. It is a great temptation for the promoter to establish a new business regardless of its future possibilities, in order that he may profit thru the sale of stock and other methods bordering on fraud. Before the collapse of the enterprize occurs, the promoter, in the terminology of the speculator, "gets out from under"; the public "holds the bag."

Underwriting the Enterprize.—The initial capital necessary to launch an enterprize is obtained thru the marketing of securities—stocks and bonds. Sometimes these new securities are sold directly to the public thru the canvassing of salesmen, newspaper advertizing, and various other forms of direct solicitation. This method is slow and costly, however, and tends to arouse suspicion as to the legitimacy of the project. In other cases a capitalist, or group of capitalists, undertakes the financing of the new venture. The usual practice is to secure the services of an investment banking house. These institutions are sometimes private organizations, such as J. P. Morgan and Company or Dillon, Read and Company, and in other instances more public corporations, such as the Guarantee Company of New York City. To them the promoter brings his project. They put experts to work analyzing it, and if they find it sound and worthy of their support, they agree to purchase outright the whole issue of the securities, usually at a discount—perhaps twenty per cent of their face value. If the issue is large, the banking house approached may ask others to associate with it in floating the issue, forming what is called a syndicate. The securities so purchased are apportioned among the various banking and brokerage houses thruout the nation, and marketed to the general public by the individual salesmen of these outlying smaller institutions. Such a practice is called underwriting an enterprize; that is, the banker guarantees the business man the money necessary to the inaugurating of a new business. He makes the guarantee knowing that he has previously built

up a market for securities. Once the issue has been sold, the banking house is eliminated from the picture, altho it is the custom with some houses to retain some interest in the businesses they float, even if they have ceased to be heavily interested financially. J. P. Morgan and Company have very often followed this practice, several times giving quite large financial support to a company they had years before originated, to protect it from failure. The reason, of course, is clear. The only way to gain the good will of the investing public, so that the market for new issues will be certain, is to see that the industries floated survive and become successful businesses. The existence of the banking house depends on keeping down the percentage of its security issues that fail.

The Provision of Permanent, or Fixed Capital.—The individuals, scattered thruout the country, who purchase the stocks and bonds from the banking house thru their brokers or local banks, constitute the specialists who supply the permanent capital to industry. The large stock exchanges, at which stocks and bonds are daily sold, such as the New York Stock Exchange, maintain a steady market for securities, permitting the individual owner to sell or make further purchases as his financial position warrants. The general public, in a large measure, furnishes permanent capital. Trust companies and insurance companies have large sums of money to invest and are becoming increasingly important as suppliers of the permanent capital of industry. The commercial banks are not supposed to furnish permanent capital, for they do not usually lend for more than ninety days, but, thru the acceptance of stocks and bonds as security for loans, especially call loans, the vaults of the banks have become the final resting place of a large fraction of the stocks and bonds outstanding. The banks accept these securities as collateral because cash can easily be obtained, should it be necessary, by selling the securities on the stock exchange where there is a constant market maintained for them.[12]

The Provision of Working, or Circulating Capital.—In the course of daily business activity, funds are required to purchase new supplies of raw materials, to pay wages, and to extend credit to purchasers where necessary. These requirements for liquid funds, or working capital, are satisfied by the commercial banks. A business man takes to his bank his own personal note or the note of a client, or perhaps a domestic or foreign draft, and secures credit on the books of the bank, giving him the right to draw funds to meet his current needs. Raw material purchased, stock on hand, and bills of lading, all furnish security for the bank and give the protection required in making the loan. The medium of the bank deposit is the one most used for supplying industry with needed liquid funds. When the finished product is sold, or when the creditors make good their obligations, the bank loans can be paid off.

[12] See also what is said of commercial banks as supplies of fixed capital in Chap. XVI.

The Penetration of Industry by Bankers.—As the size of the business unit becomes larger, the demands made on bankers for financial assistance increase in amount. Consequently, there has been an integration in banking and an increase in the size of banking operations. This has found expression abroad in the development of branch banking. In England, for example, the numerous small local banks that existed some years ago have gradually been absorbed into large organizations with branches spread all over the nation. These large organizations have great capacity for making loans and can meet the needs of large-scale enterprizes. In the United States branch banking has been but little developed, tho there has been some tendency in that direction recently.[13] We have developed, however, many large single banking institutions in the big cities, especially New York; and these institutions, under the pressure of demand for large loans, are constantly merging into still larger enterprizes. When the demand for funds is too great for one institution to supply it, the American method has been to form a syndicate of several institutions and thereby secure the needed funds.

As the interest of the banker in business increases, he demands more and more say in the control of industry. In England the banker has not pressed very hard his demand for a part in the control of industry; the English think of banking in terms of credit and currency rather than in terms of industrial control. In Germany banking and industrial organizations are closely tied up together. The large banks have directors or officials appointed as members of the supervizing councils of industrial concerns, and in some cases the reverse is true, the industrial concerns having representatives on the bank directing boards. "Berlin high finance unquestionably dominates the most representative and the large businesses in every branch of production."[14] The financial control of industry in Germany has thus proceeded to a very remarkable extent. In the United States, banking groups in New York, especially private bankers such as J. P. Morgan and Company, are exercizing more and more control over industry thru the power given by their financial operations. Henry Ford asserts that he was approached in 1920 by an official of a New York banking house, who agreed to loan him a large sum of money if he would permit the bankers to supply him with a treasurer to take charge of the financial affairs of the company.[15] There has also been a development the other way in the United States. Many industries, such as the packers, and the Standard Oil Company, own their own banks. Certainly, industrial and financial specialists are getting closer together. There is an integration going on between them. So far, it looks as if the greatest power is in the

[13] See the discussion of Branch Banking in Chap. XVI.
[14] A. Marshall, *op. cit.*, p. 343, note.
[15] H. Ford, *op. cit.*, p. 173.

hands of the banker, since he is in a position to make demands on an enterprize, once it gets into financial difficulties.

The Control of Industry.—Under the capitalistic system, the ownership of property carries with it, supposedly, the rights to control. One writer suggests that the golden rule of capitalism is "Where the risk lies, there the control lies also."[16] The development of the forms of business organization we have just reviewed, combined with the growing specialization and integration in the financing of industry, has resulted in a gradual separation of ownership and risk in industry from its control. In the corporate form of organization itself, this separation begins. If a corporation should issue ten million dollars worth of bonds, ten million dollars in preferred stock, and ten million dollars in common stock, assuming no "water" to exist in its capitalization, thirty million dollars could be invested in the enterprize. However, twenty million dollars of this sum, represented by the bonds and preferred stock, usually carry no rights of control over the business. Voting power is usually concentrated in the common stock. With the development of the holding company, the gap between control and ownership widens considerably. The thirty million dollar corporation just referred to might have been a holding company. Under such conditions, $5,100,000 worth of common stock would be sufficient to control the corporation; the remaining $24,900,000 could be used for buying a majority interest in several other companies. These other companies, in turn, could be financed with bonds and preferred stock, so that ownership of half of their common stock would suffice to control a large capital investment. These subsidiary corporations, in turn, might control still other corporations, and so on down the line. When one examines the structure of some of the large complex holding companies, he finds that a small amount of the money invested in the parent holding company controls vast sums of wealth invested by other persons possessing no control whatever in the business. Professor William Z. Ripley states that the entire control of $1,500,000,000 of public investment in electric light, power, gas, and water companies resides in only ten per cent of its capitalization.[17] Abuse of the rights of minority stockholders, preferred stockholders, and bondholders is almost inevitable under such conditions. Control becomes concentrated in the hands of a few people, while the ownership is spread over a vast number of investors.

Non-voting Stock and the Voting Trust.—Of late there has been an increased separation of control of industry from ownership that has challenged the attention of the American people. This has been the adoption of the policy of issuing common stock of two kinds—Class A and Class B —the former carrying no voting rights, and, hence, no share in control

[16] D. H. Robertson, *The Control of Industry* (1923), p. 88.
[17] W. Z. Ripley, *Main Street and Wall Street* (1927), p. 123.

of the enterprize. The problem was given publicity by Professor William Z. Ripley of Harvard University.[18] The refinancing of the Dodge Motor Company by Dillon, Read and Company of New York is an excellent illustration of the new tendency. The banking house, it has been said, bought the private business of Dodge Brothers, Inc., manufacturers of automobiles, for about $146,000,000. This sum they sought to recover with a profit by the sale to the public (at par) of bonds and preferred stock totaling $160,000,000, and also $1,500,000 in *non-voting* shares of Class A common stock. At the same time there were issued 500,000 shares of Class B common stock, no par value, and carrying the voting privilege. This stock was not to be sold to the public. This rather amazing transaction means that the banking house bought the business and sold it at a handsome profit, and yet retained control; an excellent case of having the penny and the cake too! Sometimes the Class B voting stock is held by another organization, known as a voting trust, which is, therefore, charged with the duty of the management of the industry. In this development of non-voting stock we find the separation of ownership from control practically complete. The danger to the efficient management of industry is very great, since those who control and manage have practically nothing at stake financially, except, perhaps, the reputation of the banking house involved. Just what the future will bring remains a problem, but the most serious thought should be concentrated on this problem of the proper relationship between control and ownership, in order that production may be carried on as efficiently as possible. Governmental regulation may be necessary.

The Investment Trust.—The holding company form of organization has been carried over into the financial field under the name of *investment trust*. Strictly speaking "Investment trusts are corporations, common-law trusts, or trusteed funds, set up to provide investors with the advantages of diversification and supervision of their investments."[19] The common-law trust form is rarely used today, incorporation having proven more satisfactory, but the original terminology has been retained. The funds collected by the trust are used for the purchase of recognized securities and, properly managed, offer the small investor an excellent method for distributing his investment risk. In 1931 the amount paid into American investment trusts was estimated at $3,500,000,000.[20] The preponderance of common stocks in portfolios has resulted in a confusion of the proper function of the investment trust with that of the voting trust formed for the management or control of the corporations whose securities they hold. The ease with which the shares could be sold in the rising stock market

[18] W. Z. Ripley, *op. cit.*, pp. 86–87.

[19] L. R. Robinson, Article on *Investment Trust, Encyclopedia of the Social Sciences* (1932), Vol. 8, p. 277.

[20] *Ibid.*, p. 282.

from 1922 to 1929 induced bankers to utilize this new development; the investment trust became a new method for acquiring industrial control. Thus the gap has been further widened between those who actually supply the capital and take the risk in industry, and those who are in control. The stock market collapse of 1929–1932 had such a devastating effect upon the market value of investment trust shares that growth has been at least temporarily halted. Whatever the future trend may be, the field of operations of the investment trust must be rigidly limited if the danger of further concentration in the control of industry is to be avoided.

A Concluding Statement.—As a result of our examination of the movement towards the integration of industry, we are warranted in making these conclusions: (1) The technical influences giving rise to integration are, on the whole, devices leading towards a greater degree of efficiency in industry and should be encouraged. (2) The form of business organization has been profoundly affected, leading towards the formation of huge industrial combinations with widespread ramifications. This development tends to lead to monopoly and abuse of the rights of various classes of society. Here government regulation must step in. The problem is to obtain the fruits of integration without suffering abuses of monopoly power. (3) The control of industry is tending to gravitate into the hands of a small group of financial leaders. The result has been to divorce the control of industry from the ownership of industry. Is the future of industry to be placed in the hands of trained engineers, or capable industrial leaders, or is it to gravitate into the hands of a group of bankers concentrated in New York City? In the interest of productive efficiency it should be very difficult for a man to make money except by productive effort and yet there is an alarming tendency to run large businesses with an eye on the price of the stock quoted on the stock exchange tape, rather than on the technical problems of greater production and greater service. Here again regulation of some sort by the government may be necessary; but the issue is so new and the principles involved so controversial, that it is well to withhold final judgment at this time.

Summary

Business must be effectively organized if the agents of production are to be made use of most efficiently. The Industrial Revolution, with its development of power machinery and specialization of labor, has had the effect of increasing the interdependence of all workers. In order that a successful conjuncture of the work of the specialist be achieved, standardization of the worker's task, the machine he uses, and the final product resulting is necessary. This constitutes a powerful influence towards increasing the size of the business unit. Standardization increases

the monotony of work and reduces the varieties of goods, but these disadvantages have been somewhat exaggerated. In industries using a raw material of a very homogeneous character, such as a liquid or powder, the process of manufacture is uniform and continuous, and large-scale production has decided advantages over small. Other influences tending to increase the size of the business unit are the efforts to avoid wastes of competition, large capital outlay, the large power requirements necessary under modern production methods, and the increasing importance of stability in sources of raw material and in markets for the finished product. As a result of all these influences, industry has tended towards integration, that is, the concentration in one organization of functions which have previously been carried out separately. There are, however, some technical influences tending towards small-scale business units. Standardization permits small plants to specialize on one particular part, and we also find that the technical limits to the most-efficient-size plant are reached early in the development of some industries—textiles and agriculture, for example. Even after the technically-most-efficient-size plant has been reached, specialization and integration of management and marketing are possible.

The limited liability extended the investor under the corporate form of organization has permitted the accumulation of large capital. Following the American Civil War a movement towards the combination of competing companies began. The first form of organization was the pool, in which competing companies agreed to divide traffic, profits, or territory on the basis of a prior agreement. The next form of combination was the trust in the technical sense, under which form the competing organizations turned over their stock to a board of trustees, which in return gave them trust certificates. The holding company differs from the trust in the technical sense in that the holding company is incorporated under the statute law for the purpose of holding the stock of other corporations. The latest development is the super-corporation. These huge corporations are created thru the elimination of independent competing concerns by merging their identity into that of the new organization. Recently there has been a reversion to some loose types of organization, such as the marketing coöperatives and the trade associations. Integration may be vertical, combining several stages of production under one management; or it may be horizontal, combining several plants in the same stage of production; or it may be lateral, combining industrial establishments producing various commodities having but slight connection with the main product. Large-scale production frequently develops into monopoly control. Monopoly has the advantage of developing the economies of large-scale production, eliminating the wastes of competition, and stabilizing demand and supply; but there are disadvantages. The ability to manage large enterprizes is not over-abundant.

There is grave danger of stagnation, once the invigorating stimulus of competition is lost. Price control develops, and political corruption may exist.

The financing of large business units has also undergone specialization and integration. Professional promoters inaugurate the enterprizes, investment bankers underwrite them, and the public, with the aid of stock exchanges and brokers, makes the permanent investments. Daily needs for necessary working capital are supplied by the banking institutions. There has been a tendency for bankers to increase their demands for a share in the control of industry. One of the dangers of the present method of financing industry is the separation of ownership from control. The issue of bonds, preferred stocks, and non-voting common stocks in large quantities permits a group of industrial leaders to control vast enterprizes with but a small investment of their own. This unfortunate trend has been accelerated by the growth of investment trusts. Just where the future of industry rests, whether with the guidance of the business man, of the banker, or of the engineer, is a problem as yet unsolved. Government regulation may be necessary.

SUGGESTIONS FOR FURTHER READING

The fundamental idea for this chapter was obtained from reading that stimulating little book of D. H. Robertson, *The Control of Industry* (1923). A scholarly and more voluminous treatment of the technical influences enlarging the size of the business unit is that presented in Alfred Marshall, *Industry and Trade* (1919), especially Book II. Harry W. Laidler's *Concentration of Control in American Industry* (1931) gives a factual analysis of the extent of concentration in each specific field. A very useful collection of readings is that of R. E. Curtis, *The Trust and Economic Control* (1931). For recent trends in the size of the business unit see W. L. Thorp, *The Changing Structure of Industry*, in *Recent Economic Changes* (1929) Vol. I, pp. 167–219. This latter study was continued by Dr. Thorp in *The Persistence of the Merger Movement, American Economic Review, Supplement,* March 1931, pp. 77–89.

Excellent discussions of the forms of business organization and problems arising therefrom are found in Eliot Jones, *The Trust Problem in the United States* (1922), and M. W. Watkins, *Industrial Combinations and Public Policy* (1927). F. A. Fetter's *The Masquerade of Monopoly* (1931) is a vigorous attack upon the manner in which the law has failed to control monopoly. J. C. Bonbright and G. C. Means, *The Holding Company* (1932), should be used by every student of industrial integration. A. R. Burns' *The Decline of Competition* (1936) is an able study of the growth of quasi-competitive and quasi-monopolistic enterprize. A concise analysis of the trade association movement is I. L. Sharfman's *The Trade Association Movement,* in *The American Economic Review Supplement,* March 1926, pp. 202–218. See also *Open-price Trade Associations,* Report by the *Federal Trade Commission, Senate Doc. 226,* 70th Congress, 2nd Session (1929).

The danger inherent in the trend toward the separation of control from ownership in industry is clearly challenged in *Main Street and Wall Street* (1927) by William Z. Ripley, and in *The Modern Corporation and Private Property* (1932) by A. A. Berle and G. C. Means.

CHAPTER VI

INDUSTRIAL UNREST AND CONFLICT

A. Industrial Unrest

Productive Efficiency and Industrial Conflict.—The human element in industry is divided into two very sharply defined groups—the employer and the employee, or, in more popular language, capital and labor. As long as competition, freedom of enterprize, and private property remain fundamental institutions of our economic organization, the employer and employee relationship will exist, and to maintain efficiency in production, these two economic classes must coöperate. Mutual suspicion, growing out of dissatisfaction and misunderstanding, reduces industrial efficiency both by lowering the effort put forth during periods of production and by the stoppage of work during periods of conflict. Periods of armed truce alternate with periods of war. The problem of establishing amicable relations between the employer and the employee is one of the most important questions facing civilization. In this chapter we shall examine the nature and cause of industrial unrest, the manner in which capital and labor have organized, each seeking to protect its own interest, and, finally, the methods used during the ensuing conflict. In Chapter VII we shall examine the various methods that have been devized for the purpose of arriving at a judicious settlement of industrial disputes, and in Chapter VIII we shall round out our analysis by an examination of modern attempts to revize the organization of industry by giving labor a share in management.

The Extent of Industrial Unrest.—Everyone who follows the news of the day, or who has conversed with employers or employees, must recognize the seriousness of the unrest that exists in industrial relations. It is widespread not only in the United States, but abroad as well. The publicity given the huge profits earned by many enterprizers during the World War made the unemployment and low wages of the depression years all the more difficult to bear. Some indications of the extent of industrial unrest can be obtained from the data on labor turnover and strikes. By labor turnover is meant the shifting personnel of an employer's working force; the passage of workers from one employer to another. While the causes of such shifting of workers are many, including illness, non-scientific hiring and

placing of workers, and variations in the rate of production, labor turnover remains one of the best measures we have of industrial unrest. Turnover rates of several hundred per cent are not uncommon. The United States Bureau of Labor Statistics estimates that for 75 selected industries the turnover rate is about 40 per cent. If representative for industry as a whole, this means that on the average over 5,200,000 workers change their jobs each year.[1]

The most objective form of industrial unrest is the strike. The summary given in the following table shows a rapid decline in the number of strikes

Labor Disputes and Workers Involved (1916–1937)

Period	*Average number of disputes per year*	*Relative number of disputes (1916–1921 = 100)*	*Average number of workers involved per year*	*Relative number of workers (1916–1921 = 100)*
1916–1921 . . .	3,503	100	1,798,302	100
1922–1926 . . .	1,250	36	756,359	42
1927–1932 . . .	753	21	296,954	16
1933–1937 . . .	2,495	71	1,280,290	72

from 1922 to 1933.[2] This decline in the number of industrial disputes does not necessarily imply less dissatisfaction on the part of labor. It is probable that a combination of circumstances, such as improved living standards, inadequate union programs, and the lack of a strong public and governmental sympathy for the strike technique, offer a more accurate explanation. This interpretation is supported by the resurgent wave of serious strikes which began in 1933. A considerable part of the impetus of this development must be attributed to the rise of an insurgent industrial unionism, the rise of a new group of energetic union leaders, and the marked change in the attitude of the government towards labor. The passage of federal legislation which guaranteed the rights of labor to organize and bargain collectively, strengthened materially the hand of the union.[3] Demands for official recognition of the union became the most important single cause of industrial disputes.

The normal tendency for strikes to increase in number in periods of prosperity and decrease in periods of depression must also be considered in any analysis of strike frequency. Data for the decades prior to 1930 demonstrate this principle clearly. In years of depression workers are interested in steady employment rather than higher wages and better working conditions. With prosperity, confidence returns and union activity and membership revive rapidly. The exceptional increase in the number of industrial disputes since 1933 has been explained above. This reversal of the normal relation between labor disputes and business conditions is probably temporary.

[1] Dale Yoder, *Labor Economics and Labor Problems* (1933), p. 104.

[2] Statistics compiled from *Monthly Labor Review*, May 1938, Vol. 46, No. 5, p. 1066.

[3] See *infra*, pp. 129–130.

Causes of Industrial Unrest.—*The Worker's State of Mind.* The causes at the root of industrial unrest are diverse and difficult to summarize. First in importance is the state of mind of the modern worker. The belief is widespread among workmen that the present system treats the working population unjustly. The workers, it is said, create the product of industry but they secure only a part of that product, the rest being held back by their employer. Business profits are believed to be enormous, and big business is viewed as a device for the exploitation of the masses. This feeling is not usually expressed as clearly as one finds it in the socialistic doctrine of exploitation, but it is none the less strong. The result is the growth of a strong resentment and skepticism towards employers, giving rise to "soldiering" (*i.e.,* deliberately working slowly) and limitation of output.

Inequality of Wealth.—The existence of wide differences in individual incomes is the next most important cause of industrial unrest. Those who work seem to get but little of this world's goods, while the good things of life flow in large streams to those whom the worker views as non-producers. Poverty exists alongside of apparently unlimited wealth. Regardless of the available data as to the size of the national income,[4] the worker believes that a more equitable distribution would elevate all men to a luxurious standard of living. Class distinctions arise out of inequality and the worker, viewing the extravagant living about him, especially as it is painted in an exaggerated form in the motion pictures, feels a dissatisfaction with his lot.

Economic Conditions.—There are many other economic factors against which the worker reacts, other than the smallness of his wage. He believes that the hours of labor should be shortened, giving him more leisure time, and perhaps increasing the number of jobs available. The conditions under which he works, the shifts in the nature of industry, seasonal fluctuations in employment, the business cycle, and price-level changes all profoundly affect the workman's life. He feels a lack of security; the danger of unemployment, and the poverty of old age are constantly before him. Some writers believe that this lack of security is the most important single cause of unrest.

The struggle between the employer and the employee itself leads to tactics that bring about additional unrest and conflict. For example, the recognition of the union, the right of the union to determine conditions of work, the closed shop, and similar methods of struggle lead in their own right to additional unrest and struggle.

Social Conditions.—The problem of bad housing, especially in the slums of our cities and industrial towns, leads to dissatisfaction. Lack of educational facilities for workmen and their children, lack of recreational

[4] See *infra,* Chap. XX.

facilities, bad health caused by such factors as the housing situation and undernourishment, all contribute towards an unhealthy attitude of mind. The environmental conditions under which a child lives have a profound influence on the formation of character.

Lack of Governmental Interest in Labor Problems.—Labor leaders have always declared that public officials, the courts, and the lawmakers are all prejudiced against the laborer's interests, and in favor of the interests of employer and property owner. Labor legislation, such as workmen's compensation acts, child labor laws, minimum wage laws, and social insurance, is difficult of passage. The right to strike and the existence of the union itself were declared legal only after a long bitter struggle. Once a dispute arises and a strike is called, police and local governmental authorities side in many cases with the employer against the striker. Property rights appear to be more "sacred" than human rights, in the eyes of the law. Cases are on record where employers supplied the automobiles, housing, and food for the state militia when it was called out to quell strike disorders. Men have been paid and armed by corporations and then made deputies by the local sheriffs.

The changing governmental attitude noted above, if continued, should reduce this cause of industrial unrest. Legislation restricting injunctions in labor disputes, enforcement of the Wagner Labor Relations Act, and the outspoken defence of rights of labor by prominent officials show a new and significant trend.

Demand for a Voice in Industry.—Recently there has been developing a strong undertone in industrial unrest which may be described as a belief that the worker should have some voice in the management of the industry in which he works. In the English coal strike of 1926 it was interesting to note that some of the trade union leaders were willing to consider a reduction in wages *if the industry were reorganized* under governmental supervision. The attitude of the employer, that his business is his own private property with which he can do as he pleases, is being definitely challenged. The specific form of control demanded by the workers varies with different groups and in different industries, but the general viewpoint that workers must acquire a share in the management of industry is widespread.

All these elements causing unrest can be divided into three fundamental causes. First, there is a lack of understanding as to the facts of the case and failure to appreciate the viewpoint of the other side. Both the employer and the employee are guilty of ignorance. Second, is the existence of fluctuations or maladjustments that are inevitable in a dynamic society. Third, there is the very slow, but nevertheless significant, development of a social consciousness; a feeling that there is more to industry than the seeking after profits. Industrial unrest

must be recognized as a symptom rather than as a cause of social maladjustment. The reduction of unrest is dependent upon the removal of the sources of discontent, and the roots of discontent lie deep in the soil of modern economic and social institutions.

B. Organized Labor and Organized Capital

Labor Organizations Defined.—To carry on their side of the industrial conflict laborers have found it necessary to organize themselves into trade unions. *A trade union may be defined as a permanent association of wage-earners, having for its purpose the maintenance and improvement of the conditions under which they work.* The essential characteristics of a union are the permanence and continuity of its organization, the inclusion of only wage-earners in its ranks, a militant attitude, and the substitution of collective for individual bargaining. It seeks to protect the interests of the wage-earner as against those of the employer and society in general.

Reasons for Labor Organization.—Some authorities have sought to find the origin of the trade union in the medieval craft guilds. This, however, is probably not their source, for the craft guilds organized both the masters and the journeymen of the trade into one organization, the masters being in control. The guilds were consequently as much employers' associations as they were associations of journeymen. Some early attempts were made in the twelfth and seventeenth centuries towards the establishment of separate organizations of journeymen, but there are few on record where a permanent organization resulted. The causes of the modern union movement are found in the conditions brought about by the Industrial Revolution at the beginning of the eighteenth century. The extension of division of labor, the development of power machinery, and the introduction of the factory system, all had an important bearing on the status of labor. Under the early guild system journeymen looked forward to progressing in the trade and eventually becoming masters. The crafts required only skill and simple tools and the number of masters was necessarily large. No class line developed under such conditions. When, however, the possibility of getting out of the workers' class into the employers' class was materially reduced, then the workers' attitude was changed and class consciousness developed. Today production requires the investment of large sums of capital, and the average workman finds it impossible to obtain the necessary funds to start in business for himself. Then, too, the number of jobs at the top of the factory organization must necessarily be small in proportion to the total number of persons employed. As a result of these influences, there has developed a small group of persons possessing capital and owning the

tools of production, and a second very large group of persons not owning tools, but hiring out their services to those who do. The worker sells his time to the employer, and is paid a wage in money rather than in a share of the product. His dependence is increased by the reduction of his job to a simple routine specialized task, and the number of workmen is so great that personal contact with the employer becomes impossible. The outgrowth is a strong feeling of class consciousness—a feeling that the interest of the employer is different from that of the employee. What the employer gains the employees must apparently lose. In the United States the movement towards organization has been much slower than in Europe. The wide extent of free land in this country permitted any individual possessing initiative to take up free land and become an enterprizer himself. The opportunities for developing resources and opening up the virgin continent were great in every direction. Everyone looked forward to becoming an enterprizer, just as formerly a journeyman looked forward to becoming a master. The organization of labor was consequently retarded, and today the percentage of workmen that are members of unions is much smaller in the United States than in Europe.

Benefits of Organization to Workers.—Thru organization, workers are enabled to present a unified front for common action. A single individual facing his employer is at a very distinct disadvantage. He must compete with his fellow workmen for the job and, under the stress of that competition, he is apt to drive a bad bargain. His labor is perishable; every hour lost is lost forever, and he must therefore get work at once or his family suffers thru loss of income. Idle days cannot be stored up as unsold wheat can be stored in a granary. The small income of the individual workman permits very little saving, and a short period of idleness means financial difficulties. The worker also lacks a knowledge of the market for his labor and the conditions of the trade in which he seeks work. With organization many of these disadvantages are removed, or at least materially reduced. Thru bargaining collectively with the employer, competition for jobs is reduced. The union can employ business experts to keep the laborer informed as to the conditions of his trade, and to represent him before the employer when the occasion arises. These experts can meet, on a plane of intellectual equality, either the experts of the employer, or the employer himself. The feeble demands of the individual workmen become strong collective demands of the union and are so carried to the employer. The economic demands of workers for higher wages, shorter hours, and improved general conditions of employment are effectively presented.

There are also benefits of a secondary sort obtained by labor thru organization. Pressure can be exerted for the enactment of social and

economic legislation. The members of the organization can get together to talk over their mutual problems. Unions frequently act as beneficial societies, extending to their members insurance against accidents, sickness, and unemployment. Reserve funds are accumulated to finance possible strikes in the future. Often the union office serves as an employment bureau for the trade. Educational, social, and recreational activities are fostered. To sum up, the union organization is always available for any activities in which the interests of laborers collectively are involved. In several cases they have gone so far as to establish their own banking institutions.

There are, of course, disadvantages to be found. The individual must submerge his interests in those of the group. Standard wages, standard hours, and uniform conditions of employment necessitate the individual worker giving up to a great extent his freedom of independent action. There is also the danger, present in every large organization, of faulty and unscrupulous leadership. Just as a nation armed to the teeth is more likely to enter war because of confidence in its strength, so a strongly entrenched trade union may be led more quickly into an industrial war. And finally, the militant spirit and purpose of a trade union handicaps the building up of peaceable industrial relations.

Types of Labor Organizations.—Labor organizations may be divided into three different classes or types on the basis of their structure. These are the craft union, the industrial union, and the general labor union. The *craft union* is an organization of all the workers in one particular craft or trade. Organizations of carpenters, steam-fitters, or bricklayers will serve as illustrations. The best known craft unions are the railroad brotherhoods. An *industrial union* is an organization of all the workers within a given industry, regardless of the type of work each individual may be engaged in. Craft lines are ignored. Mining workers of all sorts organized into one organization constitute the United Mine Workers of America. The employees in the clothing trade have organized an industrial union called the Amalgamated Clothing Workers of America. In the industrial union, all the workers in the industry stand together as a unit. This is a decided advantage over the craft union, in which different parts of the same industry have separate organizations, making it more difficult to obtain unity of action in case of industrial war. However, the craft union has the advantage of uniting the employees engaged in exactly the same kind of work, making it easy for them to appreciate their mutual interests. A *general labor union* is a broad organization of workers, regardless of craft or industrial lines. The only qualification for membership is that the applicant be a worker—a wage-earner. The Knights of Labor, established in 1869, was such an organization. It sought to enter politics and assumed an identity of interests of all workmen regardless

Company union { employer
[illegible] { [illegible]

of their location or type of work. Its aim was to elevate the status of workers in general. Failure to prove convincingly the close identity of interests among all workers, combined with difficulties encountered in entering politics, brought about the downfall of the organization. But for a time it was very strong, reaching the peak of its strength about 1886. The local craft or industrial union often belongs to a federation of similar craft or industrial unions on a state and national scale, and in some cases the national organizations belong to international organizations. This practice of combination permits coöperation between the various small local unions for purposes that are of general interest.

The late Professor Robert F. Hoxie suggested that a more significant classification of labor organizations could be formulated on the basis of the function they seek to perform. He suggested that unions might be termed business unions, free or uplift unions, revolutionary unions, and predatory unions, in accordance with their functional aspects. A *business union* is one that is trade conscious rather than class conscious. It expresses the viewpoint of the workers in the craft rather than that of all the workers in the industry, or of the working class as a whole. It seeks to obtain more here and now in the form of higher wages, shorter hours, and better working conditions, without regard to the welfare of others outside its own particular group. It is usually conservative, believes in the present capitalistic organization and wage system, and operates on a collective bargaining basis with employers. The *free or uplift union* is one that has an idealistic viewpoint. It may be trade conscious, but it is also class conscious, and may even go so far as to think in terms of the interests of society in general. It is conservative and law abiding. It seeks to improve the moral, intellectual, and social life of the worker, securing for him leisure, insurance, and a general improvement in his conditions of life. The Knights of Labor, already referred to, was such an organization. *Revolutionary unions* are radical both in viewpoint and in action. They are opposed to the view that there is a harmony of interests between the wage-earners and the employing class. They repudiate, or at least tend to repudiate, the existing institutional order, especially the individual ownership of the means of production and the system of wages. One branch of this type of union is composed of organizations which are willing to bargain with the employer and live up to contractual obligations for the time being, but hope in the long run to reorganize society. The Western Federation of Miners is a good illustration of this group. On the other hand, there are unions which believe in no compromise with the present system, believing rather in an organization of society purely on industrial lines. They advocate direct action and sabotage, and they often resort to violence. The Industrial Workers of the World is such an organization. A *predatory union* is one concerned solely with immediate

results, and its methods are wholly pragmatic. It seeks ruthlessly to obtain what it wants at the most appropriate time, regardless of ethical and legal scruples. The building-trade organizations have been classed as belonging to this group. Obviously no perfect illustration can be found of any one of the functional types, each organization combining several aspects of the functions described. Perhaps it would be more accurate to say that the *functions* of labor organizations can be described as business, uplift, revolutionary, and predatory, some unions emphasizing one function and some another. In many cases the function given most prominence depends on the group leaders in charge of the organization at the time.

The Growth of Labor Organizations in the United States.—The growth of trade-union membership in the United States was very slow until recent years. While the trend was steadily upward from the eighties,

MEMBERSHIP OF AMERICAN TRADE UNIONS, 1910–1937[5]

Year	*Membership*	*Year*	*Membership*	*Year*	*Membership*
1910	2,184,200	1920	5,110,800	1930	3,407,600
1912	2,483,500	1922	4,059,400	1932	3,144,000
1914	2,716,900	1924	3,536,600	1934	3,609,000
1916	2,808,000	1926	3,504,700	1936	4,575,000
1918	3,508,400	1928	3,449,100	1937	7,297,000

the total membership of over five million workers in 1920 included but 20 per cent of the entire working population. From 1920 until 1933 the trend reversed itself, reaching a new low of about three million in 1932. The National Industrial Recovery Act of 1933 probably laid the foundations for the unprecedented labor movement of the thirties. The Act provided that every industrial code approved under its authorization should contain the provision "that employees shall have the right to organize and bargain collectively thru representatives of their own choosing," free from all restraint, interference, or coercion by employers. The rigorous enforcement of this law during its short life gave new momentum to labor organization. The creation of the Committee for Industrial Organization (C.I.O.) in 1935 brought into the union field mass production industries previously unorganized so that by 1937 the total membership of organized labor reached an all-time high, for this country, of over seven millions.

The American Federation of Labor and the C.I.O.—Until 1935 the American Federation of Labor was the undisputed leader of the American labor movement. Organized in 1881, the American Federation of Labor has had two basic precepts: (1) The belief that union organization must take cognizance of the existence of different crafts and skills and organize where

[5] Data for 1910 to 1932, inclusive, from Leo Wolman and Gustav Peck, *Labor Groups in the Social Structure, Recent Social Trends* (1933), p. 832. Data for 1934 to 1937 from Carroll R. Daugherty, *Labor Problems in American Industry*, 4th edition (1938), p. 405.

possible on a craft basis; (2) the conviction that while each craft should have its own union and work independently in its own particular sphere, a national organization is necessary which will represent all unions in their common and broader needs. Propaganda for a shorter working day, minimum wage and hour legislation, the use of the union label, and assistance in the organization of new unions are good examples of its activities.

The Federation is composed of thousands of trade-union organizations, each enjoying a considerable degree of autonomy. The individual wage-earner belongs only thru his affiliation with his local union. Where a trade is organized into local, state and national unions the national organization may belong to the Federation. Where no national union exists the local union itself may belong directly. In some cases city councils of local labor unions send representatives to the Federation. To coördinate the work of the Federation four departments have been created, each one being a grouping of several allied trades. These departments function under the direct supervision of the Federation. The annual convention serves as a clearing house for labor information and thru the central executive committee a powerful influence can be exerted in the interest of specific objectives. The American Federation of Labor has persistently stayed out of partisan politics, but has put the pressure of organized labor behind any movement or action deemed favorable to labor.

At the annual convention of the American Federation of Labor in October, 1935, there developed an insurgent movement which was to enjoy spectacular successes under the banner of the Committee for Industrial Organization. To some union leaders at that convention, there appeared to be disturbing circumstances which needed consideration. First, union membership in the Federation had suffered a decline after the temporary upward surge in 1934, even tho the right to organize and bargain collectively was now guaranteed by the government. Secondly, there were entire industries (many of them of very great importance) which were practically unorganized, such as steel, automobile, textile and rubber. Finally, it was thought by some that the explanation of these facts lay in the fundamental policy and principle of the American Federation of Labor to organize on a *craft* rather than an *industrial* basis. In mass-production industries, it was felt that industrial unionism, which would unite all the workers in a particular industry in a single union, was the only effective method of achieving organization for the great masses of workers. As an outcome of the bitter struggle at the convention, John L. Lewis, President of the United Mine Workers, and the leaders of seven other large national unions met in November, 1935 and formed the Committee for Industrial Organization. This Committee began immediately an intensive organizational drive. Successes were scored in industries formerly regarded as impregnably non-union: rubber, automobile and steel. Several unions affiliated with the C.I.O., which led to the expulsion of ten

member-unions from the American Federation of Labor one year later. A bitter struggle between the two groups ensued. Today, they are, to all intents, two separate and independent labor organizations, all efforts at reconciliation having failed. The following table indicates the relative strength of the two federations:[6]

Year	*A.F. of L. Membership*	*C.I.O. Membership*
1935	3,045,347	1,050,000
1936	3,422,398	1,500,000
1937	2,860,933	3,454,000

Two significant trends are reflected in the rise of the C.I.O.: (1) The breakdown of crafts and specialized skills in industry and the increasing importance of mass production; and (2) the entrance of a strong labor movement into politics. The C.I.O. openly supported Roosevelt in 1936, developed Labor's Non-Partisan League, and succeeded in gaining control of several important local government bodies. These trends are antagonistic to the traditional principles of the A.F. of L. What the result of the struggle between the new and the old will be only the future can tell. Certainly the bitter struggle between the two labor organizations will weaken, rather than strengthen the labor movement if it is permitted to continue too long.

The Legality of Labor Organizations.—The modern labor movement had its origin in England, and it is therefore in that country that the legal battle over the right of labor to organize was fought out. Other countries, facing industrialization much later, relied largely on the precedents built up in England. At first labor organizations were considered illegal. Trade unions were established primarily to permit labor to bargain collectively with employers, for benefits that would perhaps not otherwise be obtained. This was interpreted to be conspiracy on the part of the workers and therefore contrary to the common law. The courts declared all collective action on the part of wage-earners illegal. In the early part of the nineteenth century special legislation was passed outlawing labor organizations. By 1824 and 1825 sentiment had begun to change and the restrictive laws were repealed. Gradually recognition was achieved, and by the latter part of the nineteenth century a series of laws was enacted declaring labor organizations legal and exempting them from the conspiracy charge under the common law. In 1901 an unexpected court decision, later sustained by the highest court of appeals, the House of Lords, levied a damage of over £200,000 against the Amalgamated Society of Railway Servants on the ground that their strike against the railroad had resulted in damage to railroad property. This decision cast a doubt

[6] American Federation of Labor data from *Report of Proceedings, 57th Annual Convention A.F. of L.* (1937), p. 76. Data for C.I.O. from Daugherty, *op. cit.*, p. 405.

over the legality of labor organizations once more, since it would be impossible for labor organizations to guarantee the conduct of individual members. The result was the passage of the Trade Disputes Act of 1906, which provided that neither unions nor union leaders could be charged with liability for wrongful acts committed by individual members during a strike. The individuals committing the criminal act were of course subject to prosecution; their criminal liability remained unchanged. This act forms the cornerstone of the legality of modern labor organizations and has been subsequently further developed. In the United States the precedent of England resulted in labor organizations being considered legal practically from their beginning. There were a few adverse court decisions but their influence has not been very great. In general the union was considered legal, and this has been true in the broad sense down to the present day. Several states, however, have passed laws against the syndicalistic activity which has characterized the policy of a few radical labor organizations. The question of legality in the United States has dealt largely with the methods used by labor organizations, rather than with the legality of the organizations themselves. This phase of the problem we will discuss below.

Employers' Associations.—In addition to the development of integration in industry, making possible unity of action among employers, there have developed associations of employers for the specific purpose of presenting a united front to organized labor, and resisting the growth of trade unionism. The structure of these organizations is quite similar to that of labor organizations. The local craft union has its counterpart in the local craft employers' association, such as the Chicago Team Owners Association. The industrial union has for its parallel the industrial employers' association, such as a local newspaper publishers' association or an association of coal operators. There are also associations of employers in closely allied industries, such as the National Metal Trades Association. In many cases city, state, and national federations of employers' associations have been formed, just as we found in the case of labor organizations. The Chicago Employers' Association, the Illinois Manufacturers' Association, and the National Association of Manufacturers furnish excellent illustrations. Employers' associations in the building trades also present local, state, and national federations.

From a functional viewpoint employers' associations are of two general types—business-like conciliatory associations, and militant associations. The business-like employers' associations are formed primarily to bargain effectively and collectively with wage-earners in order to gain stability for the trade by establishing amicable industrial relations. They seek to protect the interests of employers, while recognizing at the same time the rights of the laborers. The best examples of such organiza-

tions are those in the building and printing trades. Some authorities would also include the coal operators association under this head. The militant type are often associations of the business type that have found thru experience that the unions in their field did not live up to their agreements. They have therefore developed a very antagonistic attitude towards the unions. In other cases they are formed at the start for the specific purpose of killing the organized labor movement wherever possible. In many cases they are directed primarily at the demand of labor that only union men be employed in a plant. The metal trades associations and the National Association of Manufacturers have this militant attitude. Usually the employers' associations are much less permanent than are labor organizations; they are constantly being formed and disbanded.

The Philosophy of Employers' Associations.—Professor Hoxie admirably summarized the underlying assumptions, theory, and attitude of the employers' associations, more particularly those of the militant type. They are: "That a natural harmony of interests prevails in society and therefore the unions are to be restrained when they use coercive methods; that the employers' interests are always identical with the interests of society and therefore unionism is to be condemned whenever it interferes with their interests; that the interests of the worker and employer are harmonious, and therefore when the unions oppose the employer they are misled by unscrupulous leaders and are to be condemned; that the employer gives work to the laborers and therefore they are ungrateful and immoral and to be condemned when they combine to oppose him; that the employer has an absolute right to manage his *own* business to suit himself as against his workers, and therefore the unions are to be condemned when they interfere in any way with that right; that the business is his, an absolute property right, and to compel him to bargain with men collectively, instead of as individuals, is to compel him to deal with men not in his employ, with an irresponsible committee, and to assert a voice in the matters of hiring and discharge, the conditions of employment and a right to the job and the trade. . . ."[7] All this goes back to the basic question of the nature of property rights. The employers' association is seeking fundamentally to carry to the greatest possible limit the philosophy of *laissez-faire* in industry in the face of an apparently growing social conscience on the part of the general public. The trend towards increasing labor legislation, legalization of labor organizations and their methods, increased government control in industry, and similar activity, indicates a possible development which the employers believe to be unsatisfactory both to themselves and to society at large. In fairness to the attitude of employers' associations we can say that recently there has been a growth of what is comparable to the uplift philoso-

[7] Robert F. Hoxie, *Trade Unionism in the United States* (1920), pp. 195–196.

phy in labor organizations. Many employers' associations are coöperating whole-heartedly with the unions and seeking by experiments and publicity to heal the breach in their specific industries.

C. Industrial Conflict

Methods of Industrial Conflict.—Industrial relations today present a lining up on one side of labor organizations, and on the other side of "big business" and employers' associations. Each side is organized for the purpose of protecting its own interests. Both seek to devize methods that will be effective in protecting their rights and in bringing out the maximum fighting strength. The trade unions make use of the strike, picketing, boycotts, the union label, limitation of output, and the closed shop. Employers make use of the lockout, the black list, and the injunction, and they seek to establish the open shop. Conflict carried out in an organized, methodical way must result in reducing the efficiency of production.

The Strike.—When an industrial dispute develops and amicable settlement is found impossible, industrial conflict or industrial war begins. The strongest single weapon the workers possess is the strike. *The strike is a collective cessation of work by wage-earners for the purpose of enforcing a demand made upon an employer.* The demands may be defensive in nature, in that the wage-earner may be seeking merely to maintain existing conditions of employment that are being threatened, or the demands may be offensive, in that an attempt is being made to improve upon existing working conditions. The effectiveness of the strike rests in the ability of the trade union to cripple the employer's business. The employer faces a heavy financial loss as a result of the overhead cost of the idle plant, and the stock of raw materials and semi-finished goods on hand. He also faces the inability to meet contracts for delivery and the consequent loss of trade to competing firms during the period of shutdown. The first movement of the employer must therefore be towards securing new employees if possible. Since this constitutes a threat against the strikers' ability to recover their jobs on the settlement of the dispute, the strikers devote most of their attention to the prevention of the use of new employees—strike breakers or "scabs," as they are called. Right here one finds the cause of most of the violence on the part of both employers and employees that frequently accompanies labor disputes. Sometimes, to aid the strikers, union workers in other industries are called out in a *sympathetic strike* even tho they may at the time have no grievance with their own employer. There is even the possibility of a *general strike* of all the trade unionists in a given area. The great strike in Seattle in 1919 and the strike in England during the spring of 1926 were both

widespread enough to be called general strikes. The purpose of a general strike is to bring all forms of economic activity to a standstill.

In 1937 there was an epidemic of the "sit-down" strike. Workers with grievances would simply fold their arms and refuse to leave the plant. This new technique proved to be an exceedingly effective weapon in preventing the employer from continuing production. There is a grave risk of damage to life and property if large numbers of individuals are forcibly evicted from a plant.

Compulsory labor is slavery, and since individual wage-earners have the right to quit work if they care to, it would appear logical that a similar right must exist for wage-earners collectively. This reasoning, however, is really rather far from the point at issue. A strike is not simply a man quitting work. The real element present is the effort to *enforce a demand* on the employer. A striker is not quitting work permanently; *he expects to return and will resist to his full power any effort to prevent him from returning* when he so desires. A strike is simply a concerted effort to shut down a plant to enforce a demand. Should the demand be one directed towards the improvement of the workers' condition, rather than towards injuring directly the employer, the strike is generally considered legal by the courts. Strikes for shorter hours, higher wages, or better working conditions are almost always considered legal. On the other hand, strikes that take on the nature of combinations and threats directed against an employer are often declared illegal. The insistence on the employment only of union men, the calling of a sympathetic strike, or a strike called to force the discharge of a non-union man, all fall within this questionable field of legality. The underlying principle made use of by the courts is the question of motive. There is also a tendency of late to look with disfavor on strikes in public utilities and governmental service, largely on the ground of social well-being. One state, California, has gone so far as to declare all strikes legal by statute law. The legal status of the sit-down strike has not yet been definitely established, although practically all the federal and state courts have held that it is illegal and that an injunction ordering workers to evacuate the premises is proper.

Picketing.—We have said that the success of a strike depends on the ability of the workers to prevent others from being employed to take their jobs. Picketing is the attempt on the part of the strikers to prevent others from taking their places and to induce those who have not gone out on strike to cast their lot with the strikers. Usually, representatives of the strikers are stationed at entrances of the plants involved. They carry banners stating their side of the case and try by persuasion to prevent new employees from keeping the plant in operation. Often this picketing degenerates into threats and violence for the purpose of intimidating workers remaining on or entering into active duty.

The legal status of picketing is rather difficult to state. The general position taken by the courts is that persuasion is legal while the use of intimidation or violence is illegal. It is very difficult, however, to distinguish between persuasion and intimidation. Persistent persuasion is sufficient to intimidate many sensitive persons and therefore any form of persuasion might be logically considered illegal. Several states have passed anti-picketing laws, while others have legalized peaceful picketing. A decision of the United States Supreme Court in 1921 narrows the scope of legal picketing considerably. It asserts that even persuasion carried on long enough becomes intimidation, and it lays down detailed rules for the conduct of picketing, such as that only one picket is permitted at an entrance to a plant, and that workmen must be approached singly by the pickets. The decision also points out that the language of the picket must not be abusive or threatening. With so much at stake it is very easy for a picket to lose his head, even tho he seeks earnestly to restrain himself.

The Boycott.—The *boycott* in industrial conflict refers to the refusal of wage-earners to have dealings with, or to patronize, a business organization against which organized labor has a grievance. There are many varieties of boycott: (1) refusal of workers to purchase the products of their employer; (2) the persuasion, by workers with the grievance, of other union men, and sometimes of the general public, to withhold patronage; (3) the persuasion or compelling of a third party to refrain from buying things of which the workers themselves are not purchasers—machinery, for example. This third party may be forced to withhold patronage by the threat of a boycott of his product (goods made by the machinery for instance) or by a threat to call a strike in his own plant, should his plant be unionized.

The first type of boycott is generally legal. A worker can purchase where he likes and is under no obligation to purchase from his own employer if he does not so desire. The second type is usually considered illegal, since it involves malicious intent and coercion. The third kind mentioned above is also generally considered illegal, with very few exceptions, thruout the United States.

The Union Label.—The union label is a device which seeks to stimulate the sale of products made by union labor by attaching an identifying mark of some sort. The label is supposed to signify that the commodity was made by union labor and that all union standards of employment, such as absence of child labor, sanitary conditions of work, union rates of pay, and similar matters, have been complied with. It is hoped that the position of the organization is strengthened by permitting union leaders to point out to employers that the union is stimulating purchases of goods. The practice of using a union label originated in the United States and has spread over almost the entire world. It is now one of the important policies of the American Federation of Labor, tho many doubt

its value. Workmen, it is claimed, will buy where goods may be purchased at the lowest price rather than where goods are union made. The use of the label is legal; it is considered a quasi-trade mark. Many states have passed laws declaring the practice legal, and the United States Supreme Court has also agreed to its legality.

The Closed Shop.—The primary function of labor organization we found to be the establishment of collective bargaining with employers. Bargaining strength is to a large degree dependent on the percentage of men in the plant or shop who are union men—that is, members of the organization. If very few employees of a shop are members of the union, it is difficult, if not impossible, to establish standard wage rates and standard working conditions thru collective bargaining. Full bargaining power requires that nearly every man should be a member of the organization, so that a threat to strike is a threat to close down production completely. Labor organizations, therefore, have demanded a closed shop, or union shop, as it is sometimes called. *A closed shop is one in which every man employed must be a member of the union. An open shop is one in which both union men and non-union men are employed, working side by side, management supposedly making no distinction between them.* A closed shop may be either of two different sorts: a closed shop with a closed union or a closed shop with an open union. A closed shop with a closed union is one in which the employer can only employ men already members of the union; when he seeks new employees he must consult the list of union men available, submitted to him. A closed shop with an open union means that the employer can hire union or non-union men, but if a non-union man is employed he must immediately join the union, so that every man actually working is a member of the organization. Sometimes a midway form of closed shop is made use of, usually called a preferential union shop, in which the employer is required to employ union men if they are available at the union wage; and if such men are not available, he is privileged to seek employees in the open market.

Employers have been more opposed to the closed shop policy than to any other activity of organized labor. The closed shop, they claim, takes away the right of the non-union man to seek employment and forces him, even against his will, to become a member of a labor organization. This is considered undemocratic and against the theory of liberty and freedom for which this country has always stood. Employers also object that they feel their hand is constantly being forced; the pressure of organized labor is continually applied to them. A closed shop thus interferes with the personal liberty of the employer. He cannot manage his business in his own way, and, since he believes that in every business enterprize the employer should be completely in charge, operating his own business as he sees fit, the efficiency of the enterprize is threatened. With the right

to hire and "fire" limited, discipline is relaxed. A monopoly of labor is set up demanding a wage above the competitive rate in the open market. As a result of restrictions in union membership, the standardized minimum wage tends also to become the maximum, since the employer is unable to pay each man on the basis of his individual efficiency, and the wage rate in general tends to agree with that which the least capable worker can earn. This has the effect of discouraging capable workers from exercizing their full talents. Finally, employers charge that the unions must sell their idea of unionization to the wage-earners first. If this is accomplished they will not need compulsion as a means of getting members. The railroad brotherhoods are perhaps the strongest unions in the United States, and they developed under open shop conditions.

To these arguments in favor of the open shop and against the closed shop, organized labor makes a vigorous reply. It is claimed that the open shop in practice results in a new form of closed shop—a shop *closed against the union.* An open shop permits the employer to break up the labor organization if he so desires. Promotions, easy jobs, and other forms of favoritism can be offered non-union men. In cases of lay-off union men can be discharged first, and when rehiring is necessary, non-union men may be given the preference. Gradually the shop becomes a non-union shop, and employees who are members of labor organizations find it to their advantage to enter the non-union ranks. The resulting breakdown in the union reduces the collective bargaining machinery to impotency, and the struggle for standard hours, rates of pay, and working conditions becomes a losing fight. Labor leaders also point out that they are expected to enforce discipline over their members and guarantee that all agreements that are made with employers will be carried out. This is impossible unless there exists some method of disciplining members, and the most important method of bringing a member into line is to threaten the security of his job. The closed shop enables the union leaders to make agreements and then assume the responsibility for their enforcement. The employer also gains under the closed shop by the elimination of cut-throat competition in his industry. Since all competing firms are placed in the same position in their relation to labor by the establishment of the closed shop, a better *esprit de corps* is created, and the stability given the industry gives an employer the assurance that he will be able to fulfill all contracts made with the general public. Lastly, organized labor has little sympathy with the non-union man, for from its viewpoint he obtains all the advantages brought about by organized labor, without himself contributing towards the costs of the campaign thru which the gains were won.

These conflicting arguments, combined with the fact that the charges of unfair practice made by both sides can be supported by evidence taken

from the actual experience of industry, make it difficult to come to a definite conclusion as to the merits of the closed shop. Many responsible writers believe firmly in the open shop and direct their attention towards devizing methods to prevent the employer from taking unfair advantage of the opportunities given him under such conditions. Certainly a closed shop with an open union is not open to the charges of monopoly that can be levied against the closed shop with the closed union. The weight of authority seems to be in favor of the closed shop with an open union. This form obtains the advantages sought by organized labor, without the more serious disadvantages.

Limitation of Output.—From the viewpoint of efficiency in production, a serious charge against labor organizations is that they promote limitation of output. There are several explanations for this policy on the part of organized labor. Many employers have introduced the piece-rate system and then continually lowered the rate as the workers increased their output. This short-sighted policy may sacrifice the worker's future health for the possibility of immediate gain. Unions therefore demand that they be required to do only what they consider a fair day's work for a fair day's pay. Another cause is the belief in the "lump of labor" fallacy. Many workers believe there is only so much work to go round, and therefore they work slowly in order to make the work last as long and employ as many men as possible. At the present time organized labor is drifting away from many of the early forms of limitation of output. Leaders of the American Federation of Labor, such as the late Samuel Gompers and the incumbent president, Mr. Green, have gone on record in favor of increased output. They nevertheless give due warning that they will not permit the workers to be exploited, and wherever limitation is necessary to prevent such exploitation, they favor the continuation of the old policy.

There is much to justify the time-worn process of limiting output. The economist, looking at what he calls long-run adjustments, tells the worker that only thru increased output, the introduction of labor-saving devices, and generally increased efficiency can the standards of living of labor be improved. In the long run the demand for labor is not limited, and wage-earners share in the benefits of social progress brought about by dynamic changes in industry. The economist often forgets, however, that the worker lives in the short run and not the long run. The philosophy of limitation of output, in so far as the short-run period is concerned, is sound in many respects from the individual worker's viewpoint. Maladjustments in industry, seasonal trades, and variations in the demand for a product lead to irregularity in the employment of labor, and by working slowly the individual job upon which the worker is engaged may be made to last longer. The introduction of new machinery involves the same problem. In the long

run workers gain, but that is of little satisfaction to a skilled worker who is plunged to a low standard of living thru the invention of a new device that permits an unskilled worker to take his place. It is unfair to ask one small group of workmen to bear the full burden of achieving social progress. Industry must attack the basic problem of fluctuating employment and the endangering of a worker's economic position by dynamic industrial changes, if the limitation of output philosophy is to be banished from the worker's mind. In passing, we may note that the limitation of output is not solely a problem of organized labor; the practice is widespread in unorganized industry. This fact indicates that the problem is not one of combatting a carefully calculated policy of a few union leaders, but it is a problem growing out of the individual workman's instinctive reaction to the conditions under which he finds himself employed.

The Employer's Method: The Right of Discharge and the Lockout.—In his right to employ or discharge workmen as he sees fit the employer has a very powerful weapon for the control of labor in his plant. If an open shop condition prevails, he can hire enough non-union men to protect his shop from the influence of union control. He can also restrain his employees from active participation in union work by discharging on some pretext any individual whom he suspects of working actively in the union's behalf. As we have just seen, it is with the thought of curbing this power possessed by the employer that the union has been so emphatic in its insistence that the closed shop is essential to the existence and development of organized labor.

The formal act of the employer in forcing a demand on his employees is the lockout. *A lockout is the act of closing a business enterprize by an employer for the purpose of enforcing a demand on the employees by causing them to be thrown out of work.* It is the employer's counterpart of the strike. Both the strike and the lockout cause a stoppage in production, and the economic consequences are the same in both cases.

The Black List.—The *black list* is the employers' answer to the boycott. The black list refers to the practice of individual employers and employers' associations of maintaining a list of employees who have proven offensive by reason of their trade union activity. It is, in effect, a boycott of organized labor, especially its leaders—both officials and local organizers. Some industries maintain elaborate records of employees both desirable and undesirable from the employer's viewpoint. Many states have passed laws against the practice of black listing, but it is so difficult to obtain evidence that the laws have not proved very effective. The problem is especially difficult to handle because the employer has a right to know something about the man he hires or discharges, and under cover of securing this legal and justifiable information he can discriminate against the union man.

Yellow-dog Contracts.—As a protection against the growth of trade union influence, some employers have required a new employee to sign, before he is employed, a contract stating that he is not at the time a member of any labor organization and that he will refrain from joining any such organization during the period of his employment. These written agreements have been called "yellow-dog" contracts and have been bitterly fought by labor leaders. Several states have passed laws prohibiting employers from using such contracts, but with little effect. Decisions of the United States Supreme Court have held that an injunction can be issued against attempts to organize workers who have signed such agreements as a condition of employment.[8] These decisions legalized the yellow-dog contract and gave the employer a powerful enforcing weapon in the form of the injunction. As noted below, the Norris Act of 1932 declares the yellow-dog contracts to be contrary to public policy.

The Injunction.—Carrying over into the field of industrial relations the legal device known as the injunction has created vigorous opposition on the part of organized labor against employers. *An injunction is an order of a court of equity commanding the performance or the abstaining from performance of a certain specified act or acts, thereby protecting the persons seeking the injunction from irreparable damage.* When an individual disobeys the dictates of a court issuing an injunction, he is chargeable with contempt of court and is subject to a penalty fixed by the judge of the court without the privilege of trial by jury. As a device for the protection of property or person, it is admittedly a valuable part of the legal machinery and has long been successfully used. The carrying over of the principle into industrial relations is of questionable merit. The right of property protection has been interpreted by the courts to include the right of employers to access to markets, freedom in employing labor, freedom in purchasing necessary goods, and similar activity necessary to maintaining an enterprize as a going concern. In the Buck Stove and Range case the writ issued by the court enjoined officials of the American Federation of Labor, officials and members of affiliated unions, friends, sympathizers, counsels, conspirators, and co-conspirators, from referring in any way to the dispute between labor and management. It went so far as to enjoin any one from referring directly or indirectly to the dispute by the printed, written, or spoken word. During the bituminous coal strike in 1919 Judge Anderson, of the United States District Court at Indianapolis, issued an injunction requested by the Department of Justice, restraining the officials of the United Mine Workers of America from calling a strike and from distributing strike funds. The passage of the Clayton Anti-Trust Act in 1914 was thought to give protection to organized labor against unrestricted use of the injunction, since the law provided: (1) that labor was not a

[8] See *Hitchman Coal and Coke Co.* vs. *Mitchell*, 245 U. S. 229 (1917).

commodity or article of commerce; (2) that labor organizations were not to be considered illegal combinations or conspiracies subject to the federal anti-trust laws; and (3) that preliminary injunctions were not to be served without notice to the opposing party, nor was a temporary restricting order to be issued without similar notice unless it was clearly evident that irreparable injury would result if immediate action was not taken.

The law, as interpreted by the courts after its passage, failed to give the anticipated protection to organized labor. To correct this situation the Norris Act (also known as the Federal Anti-Injunction Law), was passed and signed by President Hoover, March 23, 1932. This law is very explicit and since it is so elaborate in detail only a brief summary can be given here.[9] The law provides that yellow-dog contracts are contrary to public policy. It forbids all subordinate Federal Courts to issue injunctions that enjoin individuals or groups from (a) ceasing or refusing to perform any work or to remain in any relation of employment, (b) becoming or remaining a member of any labor organization or of any employer association regardless of promises made in anti-union contracts, (c) paying, giving, or withholding strike or other benefit money, (d) assembling peaceably to act or to organize for the promotion of their interest in a labor dispute, etc. Unions are liable for damages only upon clear proof of actual participation, actual authorization, or actual knowledge of actions of their members. Finally the law contains many specific provisions relating to procedure, such as the right to the testimony of witnesses in open court, the right of appeal to a higher court, and the right of trial by jury in the usual case of contempt of court. Several states have since passed similar laws. The Supreme Court of the United States in 1938 declared the Norris Act constitutional. The higher courts now usually limit the use of injunctions to violent activities.

The Conflict of Interests.—To the uninitiated, the problem of the proper relationship between capital and labor presents a rather perplexing picture. On the one extreme are those radicals, such as the Industrial Workers of the World, who declare that the interests of the employer and the employee are in direct conflict; all the gains of the capitalist are considered unearned and the result of the exploitation of the worker. At the other extreme are those who believe in the perfect harmony or solidarity of the present economic order. This group considers capital and labor two halves of one unit, both of which are necessary and mutually dependent upon each other. Capital and labor are partners in the same enterprize with absolute mutuality of interests. The truth is that both groups are in part correct and in part incorrect. There is a mutuality of interests between labor and capital. Without either, a business enterprize would cease to exist, and the more efficiently they work together the greater the output,

[9] For a good statement of the provisions of the law see Dale Yoder, *op. cit.*, pp. 502–504.

and, consequently, the greater the income to be distributed between them. There is, however, a definite conflict of interests inherent in the fact that the income *must be divided between them.* Any increase in labor's share, other things being equal, must decrease the share that accrues to capital, and vice versa. This truth is often obscured by the rapid increase in the total national income so that workers of a certain class may be receiving a constantly smaller proportion of the total output and yet be receiving a constantly increasing share in an absolute sense. The problem shows itself most sharply in the employer's view that wages are part of costs and must be kept as low as possible, just the same as the costs of raw material and machinery. The fundamental basis of conflict, then, is found in the division of the product. The harmony of interests rests in the fact that both labor and capital are essential to production under modern industrial organization and that both groups draw their income from the same pool; the larger the pool the greater the possible income each may receive. To meet the conflict of interests, peaceful methods of settling disputes must be devized; and to carry out the harmony of interests, labor should join with capital in the management of industry. To these questions we must now turn our attention.

Summary

Mutual suspicion, growing out of dissatisfaction and misunderstanding, reduces industrial efficiency, both by cutting down the effort put forth during periods of production and by the stoppage of work during periods of conflict. The extent of this unrest is indicated by the number of strikes that occur annually and the high turnover of labor. The roots of industrial unrest lie deep in the soil of modern economic and social institutions. The chief causes are: (1) the workers' state of mind; (2) the inequality of wealth; (3) unsatisfactory economic conditions; (4) unsatisfactory social conditions; (5) a lack of governmental interest in labor problems; and (6) the demand of labor for a voice in the management of industry.

A trade union is a permanent association of wage-earners having for its purpose the maintenance and improvement of the conditions under which they work. These organizations grow out of the class consciousness that developed as the result of the separation of workers and employers brought about by the Industrial Revolution. The benefits gained by labor thru organization are the increased power that goes with collective bargaining, shorter hours and improved general conditions of employment, and the more general benefits of a social, educational or recreational sort. Disadvantages are the submergence of the interests of the individual into that of the group, the danger of faulty and unscrupulous leadership, and the fostering of a militant rather than peaceful spirit in industrial relations.

Labor organizations may be classed according to structure as craft unions, industrial unions, and general labor unions. They may be classified on the basis of function as business unions, free or uplift unions, revolutionary unions and predatory unions. The total membership of labor organizations in the United States declined after the 1920 high point, but in 1933 an upward trend began which reached a record membership of over seven million in 1937. In 1935 a group of eight American Federation of Labor unions established the Committee for Industrial Organization. This new organization quickly became independent. A bitter struggle ensued between the C.I.O. and the parent American Federation of Labor for supremacy in the leadership of the American labor movement. Trade unions are usually considered legal. Employers have organized employer organizations along lines similar to labor organizations.

In waging industrial war, the union makes use of the strike, picketing, the boycott, the union label, limitation of output, and the closed shop. Employers make use of the lockout, the black list, yellow-dog contract, the injunction, and they also seek to establish the open shop. There is both mutuality of interests and conflict of interests between employers and employees in industry. The first is based on the fact that both groups secure their incomes from the same pool and the size of that pool limits the size of their respective incomes. The second aspect grows out of the necessity of distributing that pool, since what one side receives the other must lose.

SUGGESTIONS FOR FURTHER READING

J. A. Fitch, in his book *Causes of Industrial Unrest* (1924), gives an excellent analysis of that question. Samuel Crowther's *Why Men Strike* (1920) is a very satisfactory analysis of the same subject from a slightly different viewpoint. Whiting Williams gives a most interesting description of industrial unrest in *What's on the Worker's Mind* (1921) and *Mainsprings of Men* (1925). Mr. Williams put on overalls and lived the life of a worker.

An authoritative analysis of trade unionism in the United States will be found in R. F. Hoxie, *Trade Unionism in the United States* (1920). The origins of the trade union movement are described by Sidney and Beatrice Webb in their *History of Trade Unionism* (1894). An interesting approach to the trade union problem is that of Frank Tannenbaum, *The Labor Movement* (1921). An excellent, comprehensive text is that of Carroll R. Daugherty, *Labor Problems in American Industry* (1938). See also Dale Yoder, *Personnel and Labor Relations* (1938); Warren B. Catlin, *The Labor Problem* (1935); G. S. Watkin, *Labor Problems* (1929). A valuable source of statistical information is Leo Wolman's *Ebb and Flow in Trade Unionism* (1936). Robert R. Brooks has written a somewhat popular interpretation of labor organization and its significance, *When Labor Organizes* (1937). Harry Henig's *The Brotherhood of Railway Clerks* (1937) is valuable as a careful study of the history of a very important union.

CHAPTER VII

INDUSTRIAL PEACE

A. The Problem

Why Men Strike.—If peace is to be established in place of war in industrial relations, the weapons of force must be set aside to be used only in the *greatest* emergency, if at all. In their place must be substituted legal and judicial procedure. Law and order must supplant industrial war. In the previous chapter we discussed the basic causes of industrial unrest. The unrest comes to a head in the form of some specific demand by labor or capital, and a strike or lockout results if the parties to the dispute cannot come to terms. The most important specific demands which bring about the actual strike order may be grouped under seven classes. First are strikes for higher wages or against the reduction of the existing wage scale. Second are demands for shorter hours, or, conversely, resistance against increases in the length of the existing working day. Third are demands for union recognition (which have become of late the primary cause). Fourth are attempts to protect advantages already won and threatened by the employer, such as collective bargaining and the closed shop. Fifth are demands growing out of unsatisfactory working conditions, such as methods of payment, transfer and discharge policy, promotion policy, and protection against accident. Sixth are the perplexing disputes growing out of the conflict of jurisdiction between different unions. The carpenters' and metal workers' unions fought a long drawn-out battle as to the jurisdiction of each group when metal window frames were substituted in place of wood. The introduction of new heating devices, such as steam and hot water heat, brought about a conflict of jurisdiction between steam-fitters and plumbers. And seventh are the demands of labor for some voice in the management and control of industry.

It is often very difficult to discover just what the cause is behind any specific strike. A workman may be discharged, and the union threatens to strike unless he is reëmployed. The employer may assert the man was inefficient. On this basis a long drawn-out strike may occur, and to the outsider it might look as if the efficiency of the discharged man was the issue, but to the disputants the real issue may be the union's right to dictate to

management concerning the discharge of men. This fundamental issue might never appear on the surface, even after the strike was settled. This difference between what *appears* to be the issue, and what really *is* the issue, detracts seriously from the usefulness of published hearings and decisions on labor disputes that are often offered as evidence of the problems industry faces. The real issue may never appear in the printed report.

An examination of the various immediate causes of strikes indicates that there are two very different problems that must be solved if the peaceful settlement of industrial disputes is to be substituted for war. First, machinery for the peaceful settlement of disputes between the employer and the employee under the existing form of industrial organization must be worked out. Such problems as wages, hours, and conditions of employment, illustrate this type of dispute. Second, the problem of reorganizing industry in some way to get at the basic question of the origins of the points for friction must be examined. The first problem will be the subject-matter of the rest of this chapter.

The Pervasive Effects of Industrial Conflict.—The cessation of work during a period of industrial conflict places a heavy burden upon industry. Thru the idleness of plant and men, the national income suffers because of the reduction in the volume of output. This curtailment of production shows itself in loss of money wages on the part of the worker, loss of profits on the part of the employer, and higher prices for the general public. The indirect effects of the shutting down of an industrial enterprize are just as important as the direct effects. Modern industry is a highly complex system of specialized machinery and specialized labor, each individual part performing one small but essential portion of the whole process. A breakdown at one point is apt to force a reaction at other points. If the industry in which a strike occurs is engaged in one step in the process of production, disposing of its product to another enterprize completing the next step, the second enterprize is going to suffer difficulties in obtaining needed material. Enterprizes that sell raw material to the industry closed down by the strike find their market restricted. The loss of wages by the strikers means a reduction in their buying power, and therefore a lessening of the demand for various consumption goods. For instance, if coal miners strike, all industries which use coal will find it difficult to obtain fuel, and their production will be hampered. Industries supplying coal mines with equipment, the railroads that carry the coal, and similar agencies will find the demand for their product or services reduced. Retail stores in the coal mining area notice a curtailment of consumption and place smaller orders with the manufacturers. The effects of an industrial conflict pass on step by step, just as small ripples do when a stone is dropped in the center of a pond.

Just what strikes and lockouts cost the disputants and the general

public in the United States each year can only be roughly estimated. Stuart Chase, on the basis of data from the United States Bureau of Labor Statistics, concludes that for the years 1916 to 1921 an average of 1,790,000 persons were involved in strikes and lockouts each year, and that the average time lost per man was about thirty days. This is equivalent to about 180,000 workers being constantly idle.[1] For the period 1916 to 1919 in the State of Pennsylvania the loss in wages alone was about $28,000,000.[2] The United States Steel strike in 1919 is said to have involved a wage loss of $87,000,000 and the total loss because of strikes in the year of 1919 in the United States has been estimated at $2,000,000,000.[3] The indirect costs such as publicity, legal counsel, gunmen, labor spies, and strike-breakers cannot be accurately estimated. There is something to be set on the other side of the ledger to offset the cost of strikes. The data on the costs no doubt exaggerate the loss of wages, since workers frequently find other jobs and are not, therefore, suffering complete loss of money income. Often greater productivity thru overtime and steady employment the rest of the year makes up for the loss of production suffered during the strike. Competing firms may take up the slack by increasing their output. Finally, strikes occur more frequently in the dull season, in seasonal trades, than at any other time. Much of the time lost thru strikes might have been lost thru unemployment if the strike had not occurred. Nevertheless, the economic losses which have resulted from strikes must have been very large. The surprising drop in the number of strikes in the years prior to 1932 (noted in Chapter VI) means that the losses caused by industrial disputes have been much reduced, but the spread of strikes since the fall of 1933 indicates that we cannot be certain that this apparently peaceful industrial situation had long-run significance.

The Public Interest.—During a strike, we hear a great deal concerning the injustice of the inconvenience or suffering to which the public—an innocent party—is subjected. If the coal miners strike, the public is said to suffer by the loss of coal while the strike is in progress and by the higher price of coal when it is again made available. When the transportation system is halted by a strike, the public again suffers. Who is this "public" that constantly is being injured by every industrial dispute causing a stoppage of work? Presumably, the general public consists of all those persons affected by a strike outside of the immediate disputants. Now, the majority of the consuming public in any nation is made up of the workers and their families. We are therefore placed in the position of saying that a strike is against the interests of workers in general. The truth is that every individual has a dual interest in industry—an

[1] Stuart Chase, *The Tragedy of Waste* (1925), p. 135.
[2] Solomon Blum, *Labor Economics* (1925), p. 392.
[3] Dale Yoder, *op. cit.*, p. 110.

interest as a consumer and an interest as a producer. As a consumer he is interested in low prices and steady production, but as a producer he is interested in high prices and, in some cases, the restriction of production. It may well be that a worker's interest as a consumer may be overridden by his interest as a producer in a strike, even tho he is in no way connected with the industry involved. For example, during the anthracite coal strike of the winter of 1925–26 many labor organizations contributed funds towards the elimination of the suffering among the striking miners. These same people who made the contributions were suffering from loss of coal and faced high prices when the strike was settled. They were part of the public whose interests are often of so much concern. Then why did they seek to prolong the strike by giving it their support? The reason for this action was the belief that the protection of organized labor against the threats made by employers overshadowed the importance of the workers' interest in low prices of coal. When the public interest argument is drawn into the problem of the settlement of industrial disputes, we must be careful not to use it as a justification for a solution which would result in the loss of the hard won rights of organized labor, since labor constitutes the greatest part of that "general public." There is no entity—the public—separate and distinct from the industrial citizens that make up a nation.

Methods of Settling Industrial Disputes.—The effort to substitute peace for war in the conduct of industrial relations has given rise to several different forms of machinery for making amicable settlements. The five most widely used methods are conciliation, mediation, voluntary arbitration, compulsory arbitration, and compulsory investigation.

Conciliation is the coming together of the disputants, organized labor and organized capital, for the purpose of discussing the question at issue and reaching a settlement peacefully. No outside agency is involved. The parties to the dispute themselves initiate the meeting and draw up the terms of the settlement.

Mediation is the tendering of good offices by some outside person or agency for the purpose of bringing the disputants together. If for some reason the disputants do not come together on their own initiative, a third party, such as some well-known individual or governmental agency, may attempt to bring the parties together and aid them in reaching a peaceful settlement thru conciliation. The third party, called the mediator, does not attempt to settle the dispute, but merely seeks to bring the warring factions together and create a conciliatory spirit that will permit the disputants themselves to work out a solution.

Arbitration is the submission of an industrial dispute to a supposedly impartial third party for settlement. If the disputants of their own accord elect to submit the dispute to a third party, the procedure is known as

Good offices

voluntary arbitration. If the disputants are compelled by governmental authority to submit their case to a designated third party and the award made by the arbitrator must be accepted or a penalty suffered, the procedure is known as compulsory arbitration.

Compulsory investigation is the legal prohibition of the calling of a strike or a lockout until the dispute has been submitted to a governmental agency for the purpose of careful investigation and subsequent publicity of the facts. Sometimes a decision is made and given publicity. The decision made is not binding upon either party, and once it has been rendered, the strike can be called or the lockout order issued with full legality. This procedure might better be called compulsory arbitration with optional acceptance of the award.

For convenience we may divide the methods of settlement into those voluntary in nature and those depending on compulsion. The first group includes conciliation, voluntary arbitration and mediation. The second group includes compulsory arbitration and compulsory investigation. We shall take them up in that order.

B. Conciliation, Voluntary Arbitration, and Mediation

Conciliation and the Trade Agreement.—When the representatives of organized labor meet the representatives of organized capital in conference, the result of their collective bargaining is often a document known as the trade agreement. The trade agreement states wages, hours, and conditions of employment that are to prevail for an agreed period of time. At the expiration of that period another conference must be held and a new agreement made. While not strictly a legal document enforceable at law, the trade agreement serves as a quasi-contract between the employer and his employees. It is the outward fruit of collective bargaining.

The procedure of drawing up a trade agreement is that of conciliation. The provisions of the document formulated are usually a compromise between the demands made originally by each side. After the agreement has been signed, disputes in the trade are restricted to two kinds, questions of interpretation of the agreement arising in its administration, and the broader question of creating a new agreement when the old one expires. The simplest method for the settlement of questions of interpretation of the agreement is to include in the document provision for the creation of boards of conciliation. When a dispute arises such a board is made up of an equal number of duly appointed representatives from each side. In some cases a permanent board is appointed to take care of differences as they may arise. The permanent board has the advantage of being ready when the dispute occurs. When a new conciliation board must be appointed each time a dispute arises, the excitement of the moment makes it

difficult for the conciliatory spirit to function properly. Whatever the type of board selected, each side should always be equally represented on it, and there should be no attempt made to conform to strictly legal or judicial procedure. In the rendering of the decision, a majority vote should not be sufficient, since it breeds dissatisfaction among the minority. Where both sides are well organized the vote will, of course, be either unanimous or split evenly, each party voting as a unit.

Voluntary Arbitration and the Trade Agreement.—Should the conciliation boards fail to agree, warfare can be avoided by the arbitration of the dispute. Many trade agreements provide for the creation of arbitration boards headed by an impartial chairman or umpire; sometimes a governmental agency may be called upon. Where the one-man arbitrator is selected, he should be an individual possessing the esteem of both sides. Sometimes he is appointed directly—perhaps even named—in the trade agreement, while in other cases each side appoints one arbitrator and the two so selected appoint a third. The advantage of three men on an arbitration board is that it enables the use of representatives having a technical knowledge of the industry from the angle of both sides, as well as the viewpoint of three different men. The disadvantage is that one man must finally decide if a mixed decision is given, and since the representative of labor and the representative of capital usually vote to support the claims of their own sides, the chairman usually casts the deciding vote. As in the case of conciliation a mixed decision is apt to breed dissatisfaction. This can be avoided in some cases by the rather unsatisfactory device of announcing the decision of the arbitration board as unanimous regardless of the actual vote. The use of one man is usually conceded the most satisfactory. The technical knowledge of the industry necessary can be secured thru the employment of experts from the ranks of the disputants. The term of service of an arbitrator or arbitration board should be short to permit a change if loss of confidence takes place. Long terms, however, do have the advantage of giving the arbitrators experience in settling disputes and opportunity to acquire satisfactory knowledge of the industry. An excellent compromise sometimes tried is the appointment of the board for a term of one year with reappointment as often as confidence is retained.

The Nature and Kinds of Mediation.—There are many instances where the disputants find it difficult to come to an agreement unaided by outside help. This is especially true when a trade agreement expires and a new one is to be formed. Each side may publicly have taken a definite stand, and fear to retract lest such retraction be taken as a sign of weakness. If the stands so taken are diametrically opposed, it becomes difficult to bring the disputants together. Frequently both sides would be willing to back down slightly from their published position, if at the same time their faces could be saved. Here the mediator has his great chance to tender his

good offices to bring the disputants together and help smooth the way towards a settlement. The presence of the mediator also has the effect of notifying the disputants that other parties are interested in the solution of their problem. There are two kinds of mediation in more or less wide use. The first is what Professor Pigou has rather aptly called "the eminent outsider." The advantage of such an individual as mediator is that it flatters the disputants with their importance and gives a prestige to their discussions that is helpful. The second method is that of governmental agencies, such as the setting up of mediation boards or the authorization of certain departments, for example the English Ministry of Labor or the United States Department of Labor, to assume duties as a mediator. The governmental agency as mediator has power and ability to come in early in a dispute. The governmental agency also possesses great financial resources and has a permanence that is a valuable asset.

Experience with Voluntary Methods.—Conciliation and voluntary arbitration have long been widely used in England, having first developed in the hosiery and glove-making industry and the building trades. Mediation by men prominent in public life has also been used extensively to settle important strikes. In the United States voluntary methods have not been so popular, altho there are some examples of their success. The railroad brotherhoods have operated under a trade agreement very successfully for many years. The Interstate Joint Conference of miners and operators, the trade agreement adopted by a joint conference board of the Building Construction Employers' Association and the Building Trades Council of Chicago in 1921, and the clothing-trade agreements have been reasonably successful. Governmental action has become important in encouraging such agreements.

Governmental Encouragement to Voluntary Settlement.—In England, the Conciliation Act of 1896 provided for governmental registration and conciliation boards and authorized the Board of Trade to create conciliation boards or utilize existing voluntary machinery in the settlement of disputes. The Act merely supplemented voluntary efforts and is generally conceded to have operated successfully.

In this country, most states have passed laws either creating state commissions for voluntary arbitration or empowering some state official to act as mediator. In 1913 the Act creating the United States Department of Labor provided also for the Secretary of Labor to act as a mediator and to appoint commissioners of conciliation in labor disputes if in his judgment such mediation was desirable. Between 1913 and 1921 the Department considered nearly 5,000 cases, of which 70 per cent were adjusted.[4]

A new era in the history of governmental efforts to obtain peace in industrial relations was introduced by the Wagner Labor Relations Act of 1935. In this statute were crystallized many of the principles evolved in earlier

[4] G. S. Watkins, *Introduction to the Study of Labor Problems* (1922 edition), p. 423.

attempts at labor legislation. The National Industrial Recovery Act, before it was nullified by the Supreme Court, had guaranteed workers the right to bargain collectively with their employers, and labor boards were created to carry out this provision. Later, the National Labor Relations Board, authorized as an emergency body by joint resolution of Congress in 1934, carried on similar work. The Wagner National Labor Relations Act of 1935, in turn, replaced this board by another having the same name.

The Wagner Act established a National Labor Relations Board of three impartial members with two principal duties:[5] (1) To prevent certain designated "unfair labor practices" which were regarded as improper interference on the part of employers in the process of collective bargaining; (2) to conduct elections among employees to determine the representatives that should have the right to bargain collectively with employers. The "unfair labor practices" which the Board was empowered to prohibit were designated as: (1) Interference with self-organization; (2) domination of an employee organization; (3) discriminations against union men; (4) discrimination against employees who complained to the Board; (5) refusal of employers to bargain with the official representatives of employees.

The Board's duty with respect to conducting elections required that the representatives of the majority of any group of employees should be the exclusive bargaining agency for all the group. This was not intended, however, to prevent individual workers, or minority groups, from presenting grievances to employers.

The procedure of the Board was to establish a regional office in each of 22 major industrial cities thruout the land. Whenever any employee or labor organization feels that an employer has violated the Act, a complaint can be lodged with the regional director. If the regional director finds a justifiable basis for the charges, he will file a complaint against the employer and a hearing will be held before a trial examiner. Witnesses for both sides are called to testify in order to get at the facts. If the trial examiner considers the charges unfounded, he will dismiss the case; otherwise he may recommend what action the employer should take to redress the grievance. If the employer fails to comply with the examiner's recommendations, the case is presented to the Board in Washington. Here the record of the case is fully studied, and either dismissed or the employer is commanded to desist in the unfair practices, or hold an election, as the case may be. If the employer refuses to comply with this order, then any federal court of appeals may be petitioned to enforce it. Likewise, anyone dissatisfied with Board decisions may petition the Circuit Court of Appeals for review or setting aside of the orders. After the Supreme Court (in April 1937) upheld several

[5] Material on the Wagner Act largely based on C. R. Daugherty, *Labor Problems in American Industry* (1938), pp. 927–929 and Dale Yoder, *Personnel and Labor Relations* (1938), pp. 496–497.

decisions previously rendered by the Board, the legality of the Board's powers became clearer, and the number of petitions presented greatly increased.

During the fiscal year ending June 30, 1937 the Board disposed of 2,344 cases involving 467,807 workers. In 915 of these cases the charges or petitions were withdrawn because: (1) It was decided that the charge or petition did not affect commerce sufficiently to warrant the Board's intervention; (2) the facts alleged by the party did not constitute an unfair labor practice within the meaning of the act; (3) a settlement of the dispute was reached directly by the parties; (4) the cases were transferred to other agencies of the Government or consolidated with other cases handled by the Board.[6] In many of the 1,429 cases settled, intervention by the Board took place before the dispute had advanced to the stage of strikes. In 466 of the cases, strikes were actually in progress, and in 254 cases strikes had been threatened, but were averted by the Board's intervention.

While some of the acts mentioned in this section do not deal directly with the subject of voluntary action for peaceful settlement of labor disputes, yet they were all designed to contribute toward that end. Governmental intervention has become increasingly more important as a factor in the peaceful settlement of industrial disputes.

The Merits of Voluntary Methods.—Conciliation as a method of settling disputes has many decided advantages in its favor. It does not involve coercion, and a good feeling can therefore prevail. Since the parties to the dispute themselves settle their difficulties, the settlement is made by those who know the most about it—the participants. The one great disadvantage is its inability to cope with a dispute in which both sides have taken a position which they fear to surrender because of the danger that their action may be interpreted as a sign of lost strength. Conciliation is most successful where both sides are well organized.

Voluntary arbitration can assume the burden of settlement when conciliation fails. By submitting the dispute to arbitration both sides can accept, without loss of prestige, a decision that does not carry with it full vindication of their position publicly stated. Some authorities believe that there is a danger of breeding disputes under voluntary arbitration. Since the fear of open warfare is removed, the employers or the employees may present a demand with everything to gain and nothing to lose. This difficulty can in part be counteracted by the use of a penalty. Where the difference of opinion involved in the dispute is on a fundamental principle, such as recognition of the union, voluntary arbitration does not appear satisfactory. Conciliation is much better under such conditions. For disputes of less importance, voluntary arbitration offers a very effective way out of difficulties in interpreting a trade agreement.

[6] Taken from *Monthly Labor Review,* May 1938, Vol. 46, No. 5, p. 1144.

C. Compulsory Arbitration and Compulsory Investigation

Compulsory Arbitration.—The chief essential of a plan for compulsory arbitration is the making of a strike or lockout a punishable offense. Both parties to the dispute are bound by the decision of a governmental agency or board. The compulsory arbitration board derives its power from an act of legislature. Sometimes provision is made for a money fine, in case of failure to live up to the terms of the law. The theory underlying compulsory arbitration is that industrial disputes must be brought under the jurisdiction of the judiciary, just the same as civil disputes. It is claimed that public welfare is superior in importance to the interests of the disputants. A strike of coal miners means probably famine of coal for both household and industrial uses. The householder may suffer illness as the result of the inadequate heating of his home, and the wheels of industry stop turning as a result of the curtailment in the supply of fuel. The difficulties of compulsory arbitration, however, have been generally believed so serious that this method of settling industrial disputes has gained but little headway in the United States or England. It has been most widely used in Australasia. The chief difficulty is that it deprives the workers of the right to strike, since the act of striking becomes a criminal offense. Workers believe that their present economic position is the result of the constant activity of the trade unions on their behalf, and the threat to strike is the backbone of the unions' power. Labor leaders are emphatic in their statements that organized labor would be unable to continue its campaign for the betterment of the wage-earners' economic position, without the ability to cripple the employer and thereby indicate the strength possessed by the workers when acting as a unit. A second difficulty is the impossibility of enforcing a decision of a compulsory arbitration board when that decision is contrary to the demands of a large group of wage-earners. If a strike occurred involving several thousand persons engaged in some large railroad system, it is difficult to understand just how action could be taken against these individuals and the power of the arbitration board upheld. It has been suggested that the trade union be required to deposit with the government a sum of money which can be confiscated as a penalty in case of an illegal strike, but such a sanction can have but little influence on the rank and file of wage-earners under circumstances of intense industrial excitement and unrest. Labor leaders have also asserted that it is impossible under modern conditions to obtain an arbitration board that will not be prejudiced to a considerable extent in favor of the employer. In all our legal traditions which have become embodied in common law, there is inherent a tacit acceptance of the sacredness of private property. This is bound, it is claimed, to prejudice any decision where there is a conflict between personal rights and property rights. Trade unionists also fear that compulsory arbitration will tend to weaken

organized labor, since one of the essential reasons for its existence will be removed with the elimination of strikes as a form of industrial warfare. Compulsory arbitration in Europe and the United States cannot take place on a very wide scale until confidence in the justice of the decisions rendered by our legal machinery has been increased to such a point that neither party to a dispute would have any suspicion whatever of prejudice entering into a decision handed down by an arbitration board.

The New Zealand Plan.—Compulsory arbitration has been given its most severe test in Australasia. The New Zealand plan, which is the best known, was introduced by an act passed as early as 1894. Under this plan, commissioners of conciliation were appointed by the governor of the island. When an industrial dispute arose, one of these commissioners immediately proceeded to the locality wherein the dispute had occurred and he sought there on the ground to effect a settlement by acting as mediator. If the commissioner could not succeed in bringing about a settlement, he was required by law to organize a council of conciliation. Each side of the dispute, the employer and the employees, appointed representatives, called assessors, to serve with the commissioner of conciliation as a council of conciliation. After reviewing the case, this council rendered a decision. If the award was not acceptable to either side, an appeal could be made to the court of arbitration. The court of arbitration had for its chairman a supreme court judge and two other members appointed by the governor and selected from a list of nominees made by the associated unions and associated employers' organizations of the country. This court was the highest authority to which an appeal could be taken in industrial disputes. The award it made was final and binding for the period stated therein. The board possessed power of compulsory investigation; that is, the summoning of witnesses and, if necessary, the examining of the books of the companies parties to the dispute. Once the decision was handed down it applied not only to the particular disputants who had brought up the case, but also to the whole industry in which the dispute arose. The payment of a money fine was the penalty for non-acceptance of the award of the court of arbitration. Disputes could be brought before the arbitration machinery on the request of registered unions or registered employers' associations. Any fifteen or more employees could form an "industrial union" and register such union with the government. Any three or more employers or an incorporated company could likewise form and register an association. These unions or associations made their first appeal to the commissioners of conciliation. The frank recognition of the right of labor to form trade unions was a part of the plan.

The system of compulsory arbitration was apparently accepted with favor both by employers and laborers thruout New Zealand until the world-wide depression of 1929–1933. Little opposition had developed and the general sentiment seems to be that the plan was a success. Strikes were

not completely eliminated, but most of those called were initiated by unregistered unions. A very small proportion of the disputes dealt with by the commissioners and conciliation councils were later carried to the Arbitration Court. However, on April 8, 1932, New Zealand passed an act that amended previous enactments, "in such a manner as to do away with practically all the compulsory features of arbitration in industrial disputes."[7] The government was of the opinion that compulsory arbitration had become an obstacle in the way of national recovery because of the rigid fixing of wages, hours, and other industrial conditions. In 1936 a new labor government restored the compulsory features of the original plan as part of a new labor legislation program.

The apparent success of the New Zealand experiment resulted in the spreading of compulsory arbitration over the rest of Australasia in a somewhat revized form. In 1904 an Australian federal system of compulsory arbitration was instituted in order to cover disputes extending beyond the boundaries of any one state. A commonwealth court of conciliation and arbitration was created, made up of the president, a justice of the high court of Australia, and two colleagues. The court was given the authority to compel a conference between the disputants in order to effect a settlement by conciliation if possible. Should settlement be impossible, the dispute must be arbitrated with a resulting award that is compulsory under the law. While there have been some illegal strikes, this federal court has operated with fair success for those disputes falling within its jurisdiction.

The Kansas Industrial Court.—Conditions in Australasia are so different from those of Europe and the United States that the experience with compulsory arbitration in Australia tells us little as to its possibilities elsewhere. The British government during the World War made use of compulsory arbitration as a war measure with the consent of organized labor and industrial executives, but the machinery so set up was quickly abandoned during the post-war period. In the United States an interesting experiment was made by the state of Kansas. After a nation-wide coal strike the Kansas legislature was convened in a special session by Governor Henry J. Allen in 1921 and a law was passed establishing, for the state, a court of industrial relations. The usual practice of establishing a board on which three parties—employer, employees, and the public—were represented was not followed; a strictly judicial body was created. The Court of Industrial Relations consisted of three judges appointed by the governor and was to have jurisdiction over industries affected with a public interest. The phrase *public interest* was given a rather broad interpretation and included not only the public utilities, but also industrial enterprizes engaged in the production of fuel, food products, and clothing. Strikes, lockouts, and other instruments of industrial warfare were pro-

[7] *Monthly Labor Review* (1932), Vol. 35, pp. 576–577.

hibited. The court was authorized to call witnesses, take evidence, and make an award. Failure to accept the award made the disputants liable to fine and imprisonment. In case of an industrial dispute the court was empowered to intervene on its own initiative, on the application of any interested person, or of the attorney general, or of any ten citizen taxpayers. The power of the Kansas industrial court was crippled by unfavorable decisions in the United States Supreme Court. In June 1923 that part of the act applying to the meat-packing industry was declared unconstitutional, on the ground that the industry was not sufficiently clothed with public interest to warrant infringement of the rights of citizens to security of property guaranteed by the Fourteenth Amendment to the Constitution. A later decision in 1925 went a step further and declared unconstitutional the compulsory arbitration provisions of the Kansas law in so far as they applied to working time, and it is therefore doubtful whether any form of compulsory arbitration will be considered constitutional by the Supreme Court at the present time unless the industry involved is one in which the public interest is clearly involved. The court has gone on record as believing that to compel owner and employees to continue business on terms that are not of their own making is a violation of the liberty of contract guaranteed by the Constitution. In the Kansas state elections of 1922 the status of the industrial court was made a political issue, and as a result, it was abolished, with some of its powers transferred to the state public utilities commission.

Compulsory Investigation.—We have defined compulsory investigation as the legal prohibition of the calling of a strike or lockout until the question under dispute has been submitted to a governmental agency for the purpose of careful investigation and subsequent publicity of the facts. The chief essentials of a plan for compulsory investigation are: First, the legal right of a governing board to collect all possible information, summon witnesses, and in any other way possible, obtain all the facts of the case; second, prohibition of the calling of a strike or lockout during the period of consideration of the case by the governmental agency; third, the formulation of recommendations as to the settlement of the dispute; fourth, the giving of widespread publicity to the settlement; and fifth, restoration of the legal right to strike or lockout, after the publishing of the findings of the investigating body.

The enforcement of a period of compulsory peace to permit investigation has the merit of giving time for the hot passions of the moment to cool down and permitting a settlement to be effected later in a more calm atmosphere. The excitement that comes to a head in an industrial dispute prevents each side from using reason and common sense, which would be brought into play if a period of time were permitted to elapse before settlement. What seems vital one day may seem trivial a few weeks

later. This system also recognizes openly the public interest in strikes and lockouts, and permits a crystallization of public opinion on the dispute in question thru the publicity given the facts. The order calling for a strike or lockout will be given much more cautiously after publicity has taken place. The chief disadvantage of compulsory investigation is that the wage-earner must give up the most effective part of his right to strike—that is, the suddenness with which it is called. If employers are given time to organize their industry, employ strike-breakers, stabilize their finances, etc., they may defeat a strike that would have been successful had it been called unexpectedly. A second difficulty is (as we observed in the case of compulsory arbitration) the impossibility of enforcing the prohibition of a strike against strong opposition by wage-earners. It is possible to arrest the leaders, and this often is sufficient to cripple the power of the strikers, but it is obviously impossible to reach effectively the rank and file of strikers in any dispute involving a reasonably large number of wage-earners. Professor Pigou has suggested that compulsory investigation, without any prohibition of the strike or lockout, presents possibilities for industrial peace that are worthy of a trial. As we will note below, this suggestion is being given a trial in England and in the United States at the present time.

The Canadian Experiment.—In 1907 the Canadian parliament passed the Industrial Disputes Investigation Act, which committed the Canadian people to compulsory investigation as a method of establishing industrial peace. The purpose of the act was to prevent strikes and lockouts in mines and other industries connected with the public utilities. The scope of the act can be broadened to include the settlement of disputes in other industries if both parties to the dispute agree. The duty of administration is under the Minister of Labor. Employers and employees must give at least thirty days' notice of proposed changes in the term of employment. On the application of either party to the dispute, or on the initiative of the Minister of Labor himself if he believes public welfare requires it, a board of conciliation and investigation is formed. Each party to the dispute selects a member to represent it, and the two together select a third member to act as chairman. Should the disputants fail to agree on the third member of the board of conciliation and investigation, the Minister of Labor is given the power to appoint that board. No strike or lockout can be called during the investigation of the board. Conciliation must first be tried before the board can exercize its powers of giving its own decision and subsequent publicity.

In 1923 the constitutionality of the act was attacked in the courts. The case finally reached the Privy Council of the Empire and it was decided in 1925 that the British North American Act, under which Canada is governed, had been violated. The Dominion federal government was declared

to be without authority in cases arising within the jurisdiction of the separate provinces. The Act of 1907 was then amended and repassed in 1925, limited in scope to interprovincial commerce. The individual provinces are now free to enact similar legislation covering their own jurisdiction.

There has been vigorous criticism voiced against the Canadian experiment. It has been charged that the power given the Minister of Labor has been too great. In several cases labor leaders assert that they have applied for the creation of a board when they have had a real grievance and their claim was not allowed. The interpretation of the act by the Minister of Labor has also come in for criticism. From the viewpoint of the worker, the delay in making decisions by the boards is most serious. Frequently over a month's delay has taken place, and it is easy to understand how delay of that length of time would strengthen the position of the employer and weaken that of the employee, should a strike eventually result. The penalty features of the Canadian act have not been carried out, the authorities asserting that this phase of the legislation is of little importance. Many illegal strikes have occurred. Organized labor has taken definite stands against that part of the Canadian law which involves the postponement of the calling of the strike.

In favor of the act it is said that a restraining influence has been created, reducing the economic and social loss that results from industrial warfare. The informal methods of conducting investigations, with emphasis on conciliation wherever possible, permit amicable settlement of disputes in many cases. The rapidity with which the amended act was passed and the widespread demand for similar provincial legislation, demonstrate the popularity of compulsory investigation in Canada.

British Experience: The Industrial Court Act of 1919.—The urgency of the war period carried the English government far beyond the voluntary methods of settling industrial disputes that were so typical of English industry. During the war even compulsory arbitration was enforced. The need for a reorganization of the mechanism for settling industrial disputes in the post-war period led to the passage of the Industrial Court Act of 1919. This law set up an industrial court to which parties have recourse if both sides consent, thereby carrying out the principle of voluntary arbitration. But in addition to this power it was provided that the Minister of Labor, in case of disputes in progress or about to start, could on his own initiative appoint a court of inquiry having the power to go into the merits of the case, altho without authority to compel the testimony of witnesses from either side. The right to strike was not limited and the report made by the court of inquiry dealt, not with recommendations, but solely with the questions and facts at issue. This legal machinery, no doubt, is the result of the Canadian experiment and has been utilized considerably since it was created. It constitutes the only

element of compulsion at present a part of Great Britain's peace-time machinery for the settlement of industrial disputes.

The Colorado Industrial Commission Act.—In the United States the only state having compulsory investigation, with prohibition of strike and lockout during the investigation, is Colorado. The Colorado Industrial Commission Act of 1915 was frankly modelled on the Canadian Disputes Act. It requires thirty days' notice of change in the terms of employment, and no strike or lockout is permitted until the investigation of the commission has been made and publicity given its findings. The acceptance of the award is not compulsory. Originally broad in coverage, the scope of the Act since 1923 has been restricted to industries affected with a "public interest." While opposed by organized labor and to some extent by employers, the Colorado law has been successful in preventing strikes. A number of states have systems of compulsory investigation without prohibition of strike or lockout pending investigation, but many of these state laws are inoperative or ineffective.

The Railroad Labor Board.—The Transportation Act of 1920 provided for the establishment of the United States Railroad Labor Board, charged with the duty of maintaining uninterrupted railroad service, thru the peaceful settlement of railroad labor disputes. The Board was given jurisdiction as the final court of review over all disputes involving wages, grievances, rules, and working conditions. It consisted of nine members, three representing the carriers, three the employees, and three the general public. The President of the United States was to select these representatives, by and with the consent of the Senate, from a list of names submitted by the employer and employee groups. A dispute arising between a carrier and its employees was first to be submitted to an adjustment board, to be established by agreement between the management and the employees, each group securing equal representation. Should this board fail to reach a decision, the dispute could be then carried to the Railroad Labor Board itself. Disputes could be brought before the Railroad Labor Board: (1) on its own initiative, where it believed commerce was likely to be substantially interrupted; (2) by the application of the chief executive of a road or an employee organization directly interested; (3) upon a written petition of a hundred or more unorganized employees or subordinate officials of the road directly interested; (4) on notice by the lower adjustment board that it had failed, or would fail, to reach a decision within a reasonable length of time. The act authorized the Railroad Labor Board to subpena witnesses and records for the carrying out of its duties, and, if necessary, it was privileged to seek aid of any United States District Court to enforce coöperation to this end. This provision really established a modified form of compulsory investigation of railway labor disputes—compulsory investigation without the prohibition of

strikes and lockouts. Arbitration, however, was not compulsory, and the awards of the Board were not legally binding on the parties to the dispute.

The actual operation of the Railroad Labor Board proved to be very unsatisfactory. The disputants failed to establish local adjustment boards and the Railroad Labor Board itself was swamped with cases. The jurisdiction of the Board was frequently ignored by some of the roads, and the employees themselves expressed opposition to the plan. Gradually prestige was lost and demands for improvement of the situation culminated in the passage of the Watson-Parker Act, which became a law in June, 1926.

Under the Watson-Parker Bill, the Railroad Labor Board was abolished, and new machinery created for the settlement of railroad labor disputes. This law provided for the creation of adjustment boards by mutual agreement between the carriers and their employees, the parties being permitted to establish machinery of contact and adjustment which they themselves preferred. If the dispute were not settled by this board, it might be carried to a board of mediation consisting of five members appointed by the President by and with the advice and consent of the Senate. This board could intervene at the request of either party or on its own initiative. Its chief function was to induce the parties to the dispute to submit to arbitration. Boards of arbitration were to be created when the parties to the dispute themselves consented to arbitrate, and this consent had to be recorded in a written agreement. These boards were to be composed of from three to six members, according to the disputants' selection. The law also provided for the creation of an emergency board by the President when the board of mediation notified him that disputes had not been settled as we have just described. This board was to consist of a number of impartial persons selected by the President, and its duty was to investigate the details of the dispute and report its findings to the President. After the creation of such a board, no change, except by agreement, was to be made by the parties to the controversy in the conditions out of which the dispute arose for thirty days. The Watson-Parker Act was a reversion to the old methods of mediation and conciliation, since no dispute might come before the machinery of settlement without the consent of the parties concerned. The disputants could at their option refuse even the services of the board of mediation, should they so desire. The merit claimed for the law was that it was formulated with the coöperation of representatives of labor and the carriers, and was passed with the active support of both these groups. The chief disadvantage was that the permanent board created by the Act of 1920, which would accumulate experience as it functioned, gave way to temporary boards created from time to time as occasions arose. Also, disputes were settled on the basis of the locality or region in which they arose, rather than with regard to the railroad system as a whole. This latter point, however, was conceived by the railroad to be the proper basis

for the development of future policy in the settlement of railroad disputes. The compulsory investigation feature of the Act of 1920 was abandoned in favor of mediation and conciliation,—the methods in use during the pre-war period.

Congress amended the Railway Labor Act in 1934 in the following ways:[8] (1) Employers were restrained from anti-union activity and collective bargaining agreements were to be encouraged thruout the industry; (2) a permanent National Railroad Adjustment Board was created, consisting of 18 members chosen by national unions and 18 members designated by railroads; (3) the Adjustment Board was to settle, by majority votes, disputes over interpretation of agreements; (4) awards, or settlements, were valid within reasonable time-limits. If necessary, federal district courts were available for enforcing the Board's orders; (5) a three-man National Mediation Board was substituted for the former five-man Board. The functions of the present Board are to certify collective bargaining agents, administer the restrictions placed on employer anti-union activity, and mediate disputes with respect to new trade agreements.

The Act considerably improved the method of settling disputes, many of the objectionable features of the former legislation being corrected. Disputes were settled more promptly and, with respect to *existing* agreements, subject to substantially compulsory arbitration, altho the 1926 Act was left unchanged in cases of disputes over new labor-employer agreements.

The Future.—Times and conditions change so rapidly that any definite suggestions for the solution of industrial disputes in the future are apt to bring forth intense and justifiable criticism. Our analysis in this chapter, however, has brought out certain lessons that will permit us to formulate a tentative program. The only possible use of compulsory arbitration appears to be in those industries peculiarly affected with a public interest, especially the so-called public utilities. There is a real case for the prohibition of stoppage of work in these industries, and the probability of obtaining public support for such a policy is greater than in other industries. In general, employers, employees, and the majority of those who speak for the general public, emphatically oppose compulsory methods. Our policy should be somewhat as follows:

(1) The use of voluntary methods, primarily conciliation and mediation, should be encouraged. Disputes settled by voluntary procedure tend to establish real industrial peace. Experience has demonstrated that much can be accomplished by an extension of voluntary methods.

(2) A gradual extension of compulsory investigation, without prohibition of strikes and lockouts, holds out bright prospects. Neither side can complain that their rights are abused if they are given complete freedom to act, either by strike or lockout, when and as they see fit. The general public has the right

[8] See, C. R. Daugherty, *op. cit.*, pp. 966–967.

to know at least the facts of the case in every industrial dispute. No one can justifiably object to such publicity.

(3) Industrial unrest is at the root of much of the bitterness with which industrial warfare is waged. It is a duty, both of the individual citizen and of the government, to study causes of industrial unrest and seek wherever possible to correct the conditions giving rise to this unrest.

(4) The organization of industry should be reëxamined with a view to finding the proper place of the worker in modern industry, in the hope that there may be established a greater mutuality of interests between the employer and employee than has hitherto existed. This problem will be discussed in the following chapter.

Summary

Machinery for the peaceful settlement of industrial disputes must be created and substituted for the methods of force. Strikes not only affect the well-being of the participants, but also that of the general public. It must be remembered, however, that the general public is composed largely of workers, and in any specific dispute, the interest of workers in general *as producers* may be greater than their interest *as consumers* of the product produced by the industry involved. The most widely used methods for settling disputes are conciliation, mediation, arbitration—both voluntary and compulsory, and compulsory investigation.

Conciliation is the coming together of disputants on their own initiative for the purpose of reaching a settlement. Frequently, a trade agreement is drawn up. Voluntary arbitration is the submission of the dispute by the disputants themselves to an impartial third party on whom they agree. Mediation is the offering of good offices by some outside eminent person or governmental agency for the purpose of bringing the disputants together. These voluntary methods of settling disputes have the merit of bringing about a solution by the disputants themselves. Mediation has the added advantage of bringing the parties together without loss of prestige to either side. At present, the trend is toward governmental intervention designed to encourage, directly or indirectly, the peaceful, voluntary settlement of industrial disputes. Under compulsory arbitration, industrial disputes must be submitted to arbitration and the award is binding on both parties. Strikes and lockouts are punishable offenses. Experience with compulsory arbitration has been chiefly confined to Australasia, especially New Zealand, where until recently it apparently has been successful. The compulsory features of the New Zealand Act were eliminated in 1932, but were restored in part in 1936.

In the United States, the Kansas Court of Industrial Relations, having jurisdiction over industries affected by a public interest, is our only experiment with compulsory arbitration. This court, however, has been abolished, and unfavorable decisions as to the extent of its powers by the United States

Supreme Court cast grave doubt as to the constitutionality of such courts should they be established in the future. Compulsory investigation is the legal prohibition of the calling of a strike or lockout until the question under dispute has been submitted to a governmental agency for careful investigation and subsequent publicity of the facts. Strikes and lockouts are legal after the work of the investigating body is complete. The Canadian experiment is the best known. In the United States, the state of Colorado has made use of a plan modelled on the Canadian system. It has been suggested that compulsory investigation, without prohibition of strike or lockout during the investigation, holds out promise for the future. The Railway Labor Act, as amended in 1934, has established practically compulsory arbitration for the settlement of disputes over existing trade agreements. The best future policy for the settlement of industrial disputes is development and extension of voluntary methods and the correction of the underlying industrial unrest. Perhaps industries much affected by a public interest may adopt compulsory methods.

SUGGESTIONS FOR FURTHER READING

A very good treatment of the problem of this chapter, which assisted materially in the writing of it, is that of E. S. Furniss, in his *Labor Problems* (1925), Chap. XIII. A distinctly superior theoretical analysis, deficient, however, in data on actual experience, is that of A. C. Pigou, *The Economics of Welfare* (1932), Part III, Chaps. I–VI, inclusive. An interesting and comprehensive statement of the experience of a large industry with voluntary methods will be found in Louis Levine, *The Women's Garment Workers* (1924), Parts 3 and 4. H. Broadhead, *State Regulation of Labor and Labor Disputes in New Zealand* (1908), gives a good description of early experience with compulsory arbitration in that country; a summary of the Act of 1932 will be found in the *Monthly Labor Review* for September 1932, pp. 576–577. For the point of view of labor, see Samuel Gompers, *Labor and the Employer* (1920), Chaps. I–IX. The following texts have good discussions of industrial peace: Solomon Blum, *Labor Economics* (1925); C. R. Daugherty, *Labor Problems in American Industry* (1938); F. W. Taussig, *Principles of Economics* (1921), Chap. LIX; G. S. Watkins, *Labor Problems* (1929); and Dale Yoder, *Personnel Relations and Labor Relations* (1938). In the publications of the National Industrial Conference Board and the United States Department of Labor will be found numerous excellent studies, especially rich in data on actual experience.

CHAPTER VIII

PROFIT SHARING AND JOINT CONTROL IN INDUSTRY

A. Profit Sharing

The Government of Industry.—A well-worked-out program for the settlement of industrial disputes will go far towards the establishment of industrial peace. Such a program, however, solves only half the problem, because it seeks to settle the dispute after it arises rather than to remove its underlying causes. There is a growing belief that a spirit of coöperation based on a mutuality of interests can be established between capital and labor only if the desire on the part of labor to have a partial voice in the control of industry is satisfied. During the past decade the demands of labor for representation in the management of industry have shown a strong tendency to supplant demands for higher wages, better working conditions, and similar matters as a cause of friction between the two industrial classes.

There are three different parties, or groups, interested in the results of industrial activity. There are, first, the employer or capitalist group; second, the employee or labor group; and, third, the consumer group, usually represented by the government. Just what should be the sphere of influence held by each of these groups in order to develop further efficiency in the conduct of industry? The sphere of the government is such a broad problem in itself that we must leave its discussion for separate treatment in Part V, where we shall consider in detail just what the relation between government authority and private business has been and should be. As between capital and labor three alternatives are open. First, capital—the employer—might be given the exclusive right of control; second, labor—the employee—might be given the exclusive right of control; or third, a solution might be found midway between these two extremes, extending to labor some degree of participation in management—a system of joint control. The first plan has been the accepted method in our economic organization in the past; it still remains the ideal of the conservative minded business executive.

The second alternative in its most extreme form would mean a form of socialism. We shall meet with it again in Part VI. In a narrower sense it has taken the form of *producers' coöperation*. Here the workmen supply

or borrow the required capital, rent the necessary buildings, administer the enterprize, and divide the profits. Usually the rule is one man, one vote, regardless of the amount of stock held. These attempts at the elimination of the business enterprizer have met with but slight success. Difficulty is experienced in obtaining the necessary capital, and the lack of business ability and training among workers leads to inefficient administration. Also, the members of the coöperative usually find it hard to appoint capable managers for the enterprize; they are very unwilling to pay salaries high enough to attract high-grade men. Past experience indicates that little can be hoped for in the future, by the development of producers' coöperation.

The third alternative, labor participation in management, holds out promise of much greater success, and to it we shall direct our attention in this chapter. It requires no sweeping changes in our economic system, for experiments can be made even by a single small enterprize on its own initiative. We shall first examine the device of profit sharing, which, while not strictly a form of labor participation in management, is one answer made by employers to the demand of labor for an expansion of labor's rôle in the conduct of industry.

The Nature of Profit Sharing.—Experiments with profit sharing were among the earliest attempts on the part of employers to gain the coöperation of their employees and to tie up their success with the success of the management. *Profit sharing* may be defined as *rewarding an employee with a share in the profits of a business enterprize in addition to his regular wages.* The share in the profits must be a payment in addition to the full market rate of wages paid in the locality in which the industry is situated. The practice of paying the workers a wage lower than the current wage level and requiring them to depend on a share in the profits distributed to take up the difference is not a true profit sharing principle. If this is done, workers will drift to other plants where the regular wage is assured. The agreement must be definite and must be stated prior to the distribution of the share, otherwise there is no incentive to increase the amount of effort put forth by the individual workman. Since the primary purpose of profit sharing is to induce more efficiency and greater productivity on the part of the worker, he must obviously be notified of the plan in advance. The share of the profits should be large enough to attract the worker, for the possibility of a small gain would not be sufficient to induce the worker to put forth the effort the employer desires. Lastly, each individual plan must be constructed on the basis of the individual needs and purposes which brought it into being. If the employer desires to secure continuity of employment as the result of his plan, the seniority feature must become the basic principle of the particular scheme he adopts. On the other hand, if the primary purpose is incentive to greater effort,

then the plan must be based fundamentally on the productivity of the enterprize. In practically every case profit sharing schemes are the outgrowth of the suggestions of the employer and are operated almost completely by the management without much regard for the suggestions and desires of the employees. It is the business man's own attempt at the solution of industrial unrest.

Types of Profit Sharing.—Of the various plans known as profit sharing, the three in most common use are direct or straight profit sharing, the payment of bonuses, and the distribution of stock. Straight profit sharing is what generally passes as profit sharing in current economic literature. Its chief feature is the payment of cash at the end of an agreed fiscal period. All costs of production, interest on the invested capital, salaries of the management, and similar items are first deducted. The residue is considered net profits and is distributed between employers and employees on a previously agreed basis. The chief technical difficulty in this type of profit sharing is the fixing of the salary of management and the publicity of records it requires. Workers are often distrustful of management and unappreciative of the importance of its function, and they are at a loss to understand why the executives should obtain such apparently exorbitant salaries. On the other hand, to convince employees that the plan is above board and that the profits are as the management states, the books of the corporation must be opened, and there is danger that information of the condition of the business will pass into the hands of competitors or banking institutions on which the industry depends for its financial needs. Of course, the mere increase or decrease in the profits paid annually to the employees in itself reveals much as to the financial success of the enterprize during the preceding year.

Bonus payments, strictly speaking, should not be considered profit sharing. They represent paternalistic gifts by the management to the employees. They are not based on a mutual participation plan, but on the grateful appreciation of management for the services rendered by their employees during a period of peace. Since they are paid usually without prior announcement, they can have little effect as an incentive except thru the creation of a better basis for the future. Schemes for bonus payment generally take the form of periodic payments to the employees of a certain percentage of their wages, usually not predetermined or announced in advance. Sometimes the bonus payment becomes so regular that the workers come to look upon it as part of their pay and expect it regardless of the existence of an officially announced policy. In many concerns, notably banks, the practice exists of paying semi-annually a bonus on salaries equal to the dividends declared on the stock. Thus, if the stock of the bank yielded 6 per cent dividends, the wage-earners would secure 6 per cent on their salaries. During the World War some banking institutions paid very high bonuses on this basis. The payment of a bonus equal to the dividend on stock has the merit that it

makes the worker feel he is on a par with the capitalist, and also that the share of the employee is made to fluctuate automatically with the prosperity of the concern. Bonuses frequently are paid at the Christmas period.

The issuing of stock to employees, either gratuitously or at a subscription rate below the current market value, has become one of the most common forms of profit sharing. Sometimes the distribution of stock is made in lieu of and equal to a distribution in cash; at other times the employees are given the privilege to subscribe to stock and pay for it in weekly installments over a period of years, the total payments being less than the market value of the stock at the time the distribution was made. The many schemes for stock distribution should perhaps not be classed as true profit sharing. They are often merely devices to reduce labor turnover by making the right of participation equal to the term of service with the enterprize. New employees (that is, those with less than six months' service) customarily are not permitted to participate at all, and the longer the period of employment the greater the amount of participation, up to a definite fixed limit. When used in place of true profit sharing and bonus payment, the distribution of stock supposedly has the advantages of developing thrift on the part of the employees, reducing labor turnover, and permitting the management to share the profits with the workers, without withdrawing the profits from the working capital of the enterprize. Very few of the stock distribution plans now in operation have been carried to a point where the worker owns enough of the securities to be a factor in the management of the industry. The few cases where the percentage does run sufficiently high to create such a control really constitute a form of co-partnership, and will be discussed as such below.

Experience with Profit Sharing.—Schemes for profit sharing seem to have originated in France. One of the earliest attempts was that of a house painter and decorator, Leclaire, in Paris. In order to stimulate interest in the business and thereby increase its efficiency, Leclaire announced in 1842 an elaborate profit sharing plan. With many modifications this plan has been in continuous successful operation down to the present time. Profits are divided on an agreed basis between the managers, a mutual provident society (an insurance organization), and the employees. Capital receives an agreed fixed rate of interest. Other French experiments followed. British experience with profit sharing seems to have originated under the French influence. H. Briggs and Company made an attempt at profit sharing in 1865 in Whitwood coal mines, but the plan was abandoned after a decade of trial. The most successful British experiments have been the South Metropolitan Gas Company in 1889, and the Lever Brothers Company plan established in 1909 by Lord Leverhulme. The South Metropolitan Gas Company plan originally paid cash bonuses, but later introduced instead stock distribution. The plan today carries with it, also,

a co-partnership organization, and machinery for the settlement of industrial disputes. The Leverhulme plan provides for the issuance of partnership certificates which entitle the holder to share in profits. The number of certificates is limited, and the allotment is based on the recommendations of the officials, primarily the foremen. If the employee leaves the concern the share is convertible into preferential certificates.

The Nelson Manufacturing Company Plan.—In the United States one of the earliest and certainly one of the most widely known experiments with profit sharing is that of the Nelson Manufacturing Company. Under the leadership of Mr. Nelson this company adopted a profit sharing plan in 1884 which has continued in operation with rather marked success ever since. The plan originally provided for the announcement at the beginning of the year that net profits would be shared, after a commercial rate of interest on capital had been paid, by equal division between capital, wages and salaries of employees with six months' employment or more behind them. The employees were to select an auditor to verify the computations. The employee had the privilege of leaving his share on deposit with the company. Later the plan was changed to provide for stock distribution. Following the panic of 1893 dividends were suspended for several years but later were resumed. Before any employee receives his stock certificate, he must have been with the company three years. If he leaves before his three-year service is completed, he loses his accumulated dividend. Employees are forbidden to sell their stock certificates, but if they really need funds the company stands ready to repurchase them.

Other American experiments fairly well known are those made by the Procter and Gamble Soap Manufacturing Company, William Filene's Sons Company (a Boston department store) and the Dennison Manufacturing Company.

The Advantages Claimed for Profit Sharing.—The supporters of profit sharing base their confidence on the belief that it will stimulate workers' efforts and increase their efficiency by making their income depend on the profits earned by the enterprize in which they are employed. Every workman becomes an unofficial inspector, for high production, reduced waste, and similar matters mean dollars and cents to him when the profits are distributed. It is claimed that a harmony of interests between employer and employee is created; both gain and lose together. The worker, therefore, has an interest in avoiding strikes and other types of friction in his relations with his employer. Where the seniority feature is tied up with profit sharing, labor turnover may be materially reduced, because the worker loses his share of profits if he fails to stay the year out. Also, since participation often depends on the number of years of service, there is strong inducement for the individual workman to cling to his job as long as possible. A final, less commendable motive behind profit sharing

is the combating of union power. Many enterprizers believe that a system of profit sharing will force the individual worker to look to his employer for the improvement of his condition, rather than to his union, thus weakening the hold of the union over its members.

Defects in Profit Sharing.—The amount of profits earned by an enterprize depends largely on factors outside the workers' control and for which the workers are in no way responsible. Changes in the demand for the product, mismanagement on the part of the officials, price level and business cycle movements, and similar economic factors have an important effect on the profits of industry and yet are completely outside the workers' control. It is difficult to make the worker give the best he has in him when he observes that the profits shared seem to fluctuate in a manner but little connected with the effort he puts forth. This brings out the most serious single defect in the theory of profit sharing, the failure to connect individual effort with individual reward. Not only is the worker's individual effort nullified, but the slacker is rewarded equally with the conscientious man. Unless workers can see direct connection between individual effort and individual reward, it is difficult to get the results profit sharing seeks to attain. It is primarily for this reason that present-day business executives are turning towards incentive wage systems and away from profit sharing in their effort to increase the efficiency of labor. A second defect is the limitation placed on the mobility of labor, since the employee suffers a loss if he seeks employment elsewhere. This limitation means that the bargaining power of the worker for wages is considerably reduced. He is induced to refuse jobs offered elsewhere paying a little higher wages and not to insist on higher wages where he is employed, but to put his faith in larger profits instead. The lack of business knowledge and the suspicion of the "white collar" man, the accountant, salesman, advertizing man, etc., on the part of laborers hamper the successful operation of profit sharing unless the profits are exceptionally large. Lastly, the difficulty of sharing loss when bad times face the concern has resulted in the breakdown of many profit sharing plans. Some of the most effective plans provide for loss bearing by placing in a separate fund a percentage of profits out of which losses can be met during dull times.

The Attitude of Organized Labor to Profit Sharing.—Organized labor has looked with disfavor upon profit sharing as a method of industrial remuneration. The usual attitude taken is that such schemes are merely attempts to obtain more work for less pay. Stock distribution plans are viewed with scorn, because the distribution usually is such a small percentage of the entire capital and because participation is so rigidly tied up with seniority, reducing the mobility of labor. Many leaders of organized labor believe that the problems of industry today can be solved only by attacking the broad problem of wages in industry as a whole. The attempt

to improve conditions by working within an individual plant they believe doomed to failure. We are living under a wage system, and it is said that the job of labor is to make its share as large as possible, operating on broad lines, rather than on the basis of the individual plant. True profit sharing, say these leaders, would exist only when the union wage level was maintained as a basis.

Conclusion.—The failure of the profit sharing movement to stand the test of time is the greatest argument against it. Experience with various schemes covering almost a century and spread over most of western Europe and the United States has resulted almost universally in failure. Many plans function successfully for a short period under sincere and able leadership, but later break down. A few outstanding successes have been made, but, broadly speaking, profit sharing has not proved a permanent institution looking towards the betterment of industrial relations. Contention rather than coöperation often develops. The workman is skeptical of the salaries paid management, of the dividends on stock, and he is constantly looking for the "joker," some ulterior motive which he thinks the management must have in mind. Profit sharing apparently will work more successfully where the plant in which it is installed is small. Where the number of employees is large it is very likely to break down. Much depends on the personality and sincerity of the leadership under which it is instituted. Business men such as Mr. Nelson and Lord Leverhulme would probably operate successfully almost any plan installed. Their success is to be attributed more to their own ability than to the inherent merits of profit sharing systems. Profit sharing does not act as a substitute for the wage system, and a far better approach to the problem of efficiency is that of incentive wage systems and some form of real labor co-partnership in industry.

B. Joint Control in Industry

Joint Control.—Those who oppose the demand of labor for a partial voice in the management of industry usually base their case on the ground that such policy would interfere with the right of a business enterprizer to manage his business in his own way. Their reason for considering participation in management by labor an abuse of the power of the business enterprizer rests in the belief that ownership and risk-taking should carry with them the control and management of industry. It is the capitalists and the officials who bear the financial risk of running an industry. It is claimed that the essence of our modern system of industrial enterprize is found in the close connection between risk bearing, ownership, and the control of industry. To give a partial voice in management to labor without labor at the same time sharing in the financial responsibility of an industry —that is without the assumption of risk—is considered a dangerous policy.

Then too, past experience in ruling a nation and in managing industry indicates rather clearly that a one-man organization is by far the most efficient, assuming that one man to be a capable individual. "Too many cooks spoil the broth." If the capable individual holds the reins of power and is held directly responsible for the results achieved in a business enterprize, a smooth working machine is much more apt to result than where several heads, with divided power, are charged with the duties of management.

However, the case for joint control is strong. In the first place, the assumption that workers do not bear part of the risk of industry is a false one. A slack period of production means unemployment to the workers, and the complete failure of an enterprize means that the worker must seek permanent employment elsewhere. Enterprizes affected by seasonal variations quite generally lay off their employees during the slack period. In other words, the workers bear part of the *financial risk* of the industry. If wages had to be paid continuously, regardless of the condition of the industry, just as interest on bonds and other forms of indebtedness must be paid, then it could be truly said that workers did not share in the risk of industry. But the laying off of men for short periods of seasonal slump, or permanently when a change in the status of industrial enterprize takes place, really means that the management has shifted to the worker a heavy financial burden which the industry itself would otherwise be forced to assume. Laying off men during the seasonal slump, for example, is the practical equivalent of saying to the workers, "In order to cut expenses and reduce the financial loss to the owners of this business we shall refrain from paying you part of our liquid assets as a wage until our economic position is improved." In addition to the financial risk, workers also assume the risk of accident, occupational diseases, and similar risks of a personal nature. Secondly, there is the possibility that joint control will materially reduce the extent of labor "soldiering" and making the work last as long as possible—a practice previously alluded to as leading to much waste and inefficiency. Most of these practices represent labor's attempt to protect itself against forces which it cannot govern. Without a voice in management, labor is helpless and finds such problems as continuity of employment, hiring and discharging, completely outside its control. Thirdly, the power of organized labor will be more conservatively utilized if some responsibility for the management of industry is placed upon the workers' shoulders. There is nothing like responsibility for tempering one's demands. If the leaders of organized labor have a part to play in the management of industry, it is highly probable that they will be more cautious in the demands they make and more thoro in their study of the problems facing the management, since responsibility for their actions must be assumed if management recognizes their rights to a voice in control. Fourthly, many authorities

believe that the talent of individual employees can be better made use of under a system of partial labor control. Thru the shop organization workmen can make suggestions and exercize the ability they possess beyond the mere tending of a machine. And finally, unquestionably a better spirit of understanding will exist in industry if labor feels that it is a co-partner and stands with capital at the helm of the business. For example, when a demand for higher wages is refused on the ground that the industry is in such a financial position that it would be impossible to pay the increased wage, the workers can accept the decision with much more confidence and mental satisfaction if they know that the decision was reached in the presence of, and with the consent of, their own representatives. We found in Chapter VI that a considerable amount of industrial unrest is traceable to lack of understanding among the laboring classes of the true nature of industry and the technical problems of operation. Hence any device that seeks to substitute a real spirit of understanding, developing a viewpoint devoid of suspicion, merits careful attention.

Industrial Democracy.—The nineteenth century saw the downfall in western Europe of political absolutism. The struggle for the establishment of representative parliamentary bodies and the rapid extension of the right of suffrage curbed the power of the hereditary monarchs, thus freeing the average man from the shackles of political oppression. Government was to be of the people, by the people, and for the people. No man was to suffer political persecution at the hands of despotic power. It is now claimed that the twentieth century will see a similar downfall of economic absolutism. Industry is to become more democratic, giving the average man, in this case the workman, a more prominent place than he previously has held. A man's standard of living and his health are dependent on the manner in which he earns his living. The right to protest against political despotism is no more important than the right to protest against industrial despotism. Man has earned the right to a voice in the conduct of the government under which he lives. Why should he not also acquire a right to a voice in the conduct of the industry on which he depends for a livelihood? So runs the argument, with the battle cry—political democracy in the nineteenth century, industrial democracy in the twentieth century! If the workers are to obtain a voice in industry, there are two possible lines of development for the achievement of that end within the present capitalistic organization of society. First, the capitalists or owners of the business might be persuaded or forced to consent to the extension of a share in the management of industry to the authorized representatives of the workers. 2 Second, the workers might themselves obtain a proprietary interest in a business thru the ownership of stock, gaining managerial power thru the voting power of their securities. The first type of development finds its best expression in the shop committee and works council movement, while the second may be

seen in the numerous experiments now being made by individual concerns with the co-partnership idea.

The Shop Committee.—During and since the World War a very interesting movement, known as the shop committee movement, has come into prominence. This development represents an attempt to recognize the demand of labor for a voice in the control of industry, in so far as his immediate working conditions are concerned. A shop committee is composed of representatives of the employees and employers within a single shop or plant. They have grown up outside the organized labor movement. In fact, they owe their very existence, frequently, to an attempt to meet the challenge of organized labor by achieving its purposes without its recognition. A shop committee differs radically from the trade union organization in that: (1) the unit is a shop or plant and not the craft or industry; (2) employers as well as employees are usually represented; (3) the plans are instituted by the employers and not the employees. When the arrangement is extended to include an entire plant, it is sometimes called a works council, and, in some cases, the organization extends to an industrial district and becomes what is known as an industrial council. In 1926 it was estimated that 913 works councils were in operation in 432 separate companies. The number of workers under the plan for that year was estimated at 1,369,078 or approximately forty per cent as many workers as were members of trade unions.[1] Many of the committees were formed under the supervision of the National War Labor Board. It is probable that the number of the committees has not increased since 1926 and, while reliable information is not available, the depression years have likely reduced both the number of committees and the number of employees involved.

The Purposes and Defects of Shop Committees.—The purpose of shop committees (other than the questionable motive of establishing a substitute for trade unions) is to reduce industrial unrest in three ways: First, it creates machinery for the prevention of industrial disputes by giving the workers a part in the formulation of management policies that directly affect them, such as the right of discharge, promotions, working conditions, and wage payment systems. Second, it establishes machinery for the peaceful settlement, thru conciliation, of disputes that do arise. Third, it gives the worker a feeling that he is not merely an element of cost along with raw material and machinery, but is considered an important part of the plant organization. He is treated as a partner with the hope that coöperation and good feeling will be established. Such a plan has much inherent merit, but defects have hampered its development. As already stated, the plans are usually instituted by the employer and he generally arranges that the organization of employees with which he deals be restricted to workers

[1] Leo Wolman and Gustav Peck, *Labor Groups in the Social Structure, Recent Social Trends* (1933), pp. 844–845.

actually on the plant's payroll. Much of the controversy over the desirability of shop committees (and of the co-partnership plans to be discussed later) has centered around the creation of these so-called company unions. In their favor, employers assert that: (1) local persons settle local disputes and no one is in a better position to understand the circumstances and problems involved in a given industrial dispute than those who are on the ground and directly affected by it; (2) a close personal acquaintanceship is established between the leaders of the men and the leaders of management, and, therefore, regardless of the seriousness of the dispute involved, the bitterness on both sides will be reduced, permitting negotiations to be conducted on an amicable, coöperative basis. If trade union leaders are brought in from the outside, their attitude is usually hostile or militant, and they find it difficult to assume a conciliatory point of view. The opposition to the company union has come, as can be supposed, from organized labor. It has been charged that the union, being the creature of the employer, possesses little independent power. The election of representatives can be controlled by management, making a democratic organization impossible. Committee men can be intimidated, for they may lose their jobs if they obstruct management plans owing to the fact that they have no strong outside union to support them. The use of business experts brought in from the outside is prohibited, and the employees do not secure the competent advice needed to guide them in presenting their case. Should an actual conflict break out, there exists no strong trade union organization to support the strikers. In other words, the committees created may become mere tools of the management because of the smallness of the unit on which their authority rests; the unit of organization is the company itself. Not only labor may suffer, but the employer himself may be affected, for he is not protected against wage cutting on the part of an unfair competitor. No one plant can fight individually the trade practice of an industry as a whole.

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The Future of Shop Committees.—The shop committee furnishes an excellent method for interpreting and administering a trade agreement. Both the employers and employees being represented on the committee, questions of interpretation and administration can easily be submitted to it and handled in a very satisfactory manner. The committees also recognize the worker's interest in the plant and give him a chance to assist in management, even if in but a small, unpretentious way. The problems in the individual plant are settled by those who know them best—the workers and employers within that plant. Every enterprize has its own local conditions and problems, understood only by those directly engaged in the plant under consideration. This has been given as the reason for the Pennsylvania Railroad's opposition to the Railroad Labor Board, and for establishment of company unions, not affiliated with the organized labor movement. The future of shop committees seems to lie in the direction of the adoption of

the shop committee system as a supplementary organization to the trade union. Organized labor generally supports the shop committee plan when accompanied by recognition of the union on the part of the employer.[2] Modern industry needs both methods, the one taking care of the broad problems of industry as a whole, and the other taking care of the immediate problems of the individual plant. In this connection it is significant to note that most of the failures of shop committee plans have taken place where the plan was forced on the employer by the National War Labor Board and not adopted voluntarily.

The Whitley Councils.—In 1917 a report on the relation between employers and employees in Great Britain was made by a parliamentary committee which advocated the establishment of industrial councils, since known as the Whitley councils. The scope of these councils was to go beyond the mere settlement of industrial disputes and extend to a partial participation of labor in the control of industry. The purpose was to secure a remedy for industrial unrest as an aid to the winning of the war then in progress. These councils attacked such broad problems as unemployment, industrial technique, industrial research, industrial training, trade processes, and welfare work. The report of the parliamentary committee recommended the establishment in the various industries of local works councils, district industrial councils over a large area, and finally national joint industrial councils. The Whitley councils in England differ very markedly from the shop committee system in the United States in two basic respects. First, they are *built on unions,* recognizing and making use of the union organization. Second, the proper unit of organization is taken to be industry as a whole, rather than an individual plant. These councils constitute a compromise between the union organization and the employers, rather than a substitute for union organization on the part of employers. The idea at first spread rapidly, but later there developed a tendency towards a decline in interest. A survey made in 1923 indicated that over a thousand works councils had been formed up to that time. Between January 1918 and December 1921 there were seventy-three joint industrial councils established, but by June 1925 this number had been reduced to fifty. There has been considerable decline in this number since 1923. Many reasons have been given for the decline. First, the union leaders apparently have felt that the joint council movement was an attempt to side-track the growing movement towards workers' control of industry. Second, the union organization desire agreements on a national scale, while the employers, on their part, desire local agreements. Finally, the spirit of class war which has been so rampant in England since the close of the World War produced an environment which was hostile to any attempt towards conciliatory joint organization between capital and labor. The result has been that the

[2] E. S. Furniss, *Labor Problems* (1925), p. 590.

Whitley councils have placed their emphasis largely on controversial matters, especially wages and conditions of employment. Very little has been done in the direction of increasing the efficiency of production and establishing industry firmly on the road towards a peaceful constructive future policy. Until the class consciousness in England today loses some of its bitterness, any plan for joint control must meet with serious difficulties.

Union-Management Coöperation.—The most recent experiment in obtaining efficiency thru extension of partial control in industry to labor is that being made by several American and Canadian railroads under the leadership of the Baltimore and Ohio Railroad. The railroad shopmen suggested, even before the strike of 1922, that they be permitted to coöperate with management in the operation of the shops. They finally obtained the consent of Daniel Willard, president of the Baltimore and Ohio Railroad, and the experiment was begun in the Glenwood shops of the Baltimore and Ohio Railroad in January, 1923. The unions retained a consulting engineer, Mr. Otto S. Beyer, to act as labor expert to coöperate with management in placing the shop on an efficient basis. The plan was quickly extended over the entire railroad system and was introduced into the Canadian National Railway System by the late Sir Henry Thornton. Later the Chicago and Northwestern Railroad and the Chesapeake and Ohio Railroad were added to the list. The principles of union-management coöperation have been applied in several companies outside the railroad field. The most notable case is that of the agreement between the Rocky Mountain Fuel Company of Denver and the United Mine Workers of America. The plan adopted by Yeomans Brothers of Chicago is also of interest because that concern operates under a closed shop agreement.

The Principles of Union-Management Coöperation.—The theory of union-management coöperation may be stated in seven basic requirements. "These are: (1) full and cordial recognition of the standard unions as the properly accredited agents to represent railroad employees with management; (2) acceptance by management of the standard unions as helpful, necessary, and constructive in the conduct of the railroad industry; (3) development between unions and management of written agreements governing wages, working conditions, and the prompt and orderly adjustment of disputes; (4) systematic coöperation between unions and management for improved railroad service and elimination of waste; (5) stabilization of employment; (6) measuring, visualizing, and sharing fairly the gains of coöperation; (7) perfection of definite joint union-management administrative machinery to promote coöperative effort."[3]

The machinery of coöperation is a committee composed of representa-

[3] Otto S. Beyer, Jr., *The Technique of Coöperation,* p. 7, published in the *Bulletin of the Taylor Society,* February 1926. The material in these paragraphs on union-management cooperation is largely based on the February 1926 issue of this bulletin.

tives of both sides built on the already existing union organization. The representatives of labor and capital meet in joint conference and consider such broad problems as job analysis, standardization, improving the quality of the work, the proper balancing of forces and work in the shops, the securing of new business for the railroad, and the stabilizing of employment. Committees meet locally in the shops and also in large "system" meetings. This plan does not eliminate the old union organization for the settlement of grievances and collective bargaining; it merely supplements that organization. In other words, it is not a method for the settlement of industrial disputes, but is a definite step towards the partial participation of labor in management.

Significance of Union-Management Coöperation.—The success of union-management coöperation holds out bright hopes for the future of industrial relations. It represents a promise of labor to society that the policies of restricted output and opposition to scientific management will be withdrawn, *if organized labor is to be protected from abuses resulting therefrom by a voice in the management of industry.* The unique experience of a union calling in an efficiency expert to eliminate waste and inefficiency from railroad car shops possesses a significance that it is impossible to exaggerate. At the Atlantic City Convention of the American Federation of Labor in 1925 a resolution was passed, announcing the support of the union-management coöperation plan by the American Federation of Labor and recommending its spread to other industries. It would appear that here is a possible solution to some of the difficulties of industrial relations, which gives the desired efficiency from the employers' viewpoint, and does not interfere with the principle of trade unionism held so important by labor. Labor can assume an obligation to increase production and efficiency. In place of a controversial habit of thought is substituted a coöperative habit of thought. The plan has stood the acid test of business depression far better than other forms of joint control and its development should be watched with attention by those interested in the future of industrial relations.

Forms of Co-partnership.—Turning to the question of co-partnership in industry, we find that the degree of partnership extended workers varies widely in the different plans that are now in operation. The essence of industrial co-partnership, as we are using the term in this chapter, is the ownership of voting stock of a corporation by its employees. The stock passes into the hands of the workers in various ways. In some corporations, stock certificates are given the employees in the form of a bonus at stated times during the fiscal year. In others, the employees are permitted to subscribe to stock, with the management contributing towards its purchase dollar for dollar with the employee. Frequently, stock is sold at a rate somewhat less than the market value of the securities at the time. In some plans, the stock is owned by each employee as an individual, while in others

the employees as a whole, thru some form of association, hold a block of stock. In the latter case, the individual worker simply owns securities by virtue of his membership in the association. As noted above, the exact form of stock ownership depends on the object of the plan in the minds of the management. Management may be seeking primarily to reduce labor turnover, or it may desire to develop a real co-partnership spirit in the enterprize. The type of plan must be adjusted to the purpose for which it was adopted. By the use of co-partnership, advocates of the plan believe that the sharpness of the division between employer and employee can be somewhat reduced. The employee, thru the possession of stock, becomes to that extent a capitalist and himself an employer. By the ownership of securities, employees may obtain the right to appoint a director or directors, and carry their voice in management right to the top of the organization.

It is conceivable that under some plans, the workers may eventually accumulate enough stock to control an industry, but an examination of even the best known plans shows this to be a most remote possibility. Employees of the Fleischmann Company own about eighteen per cent of its outstanding stock; Swift and Company employees own about thirteen per cent; the United States Steel Corporation employees own about nine per cent; and Pennsylvania Railroad employees own less than one per cent.[4] Relatively few companies show employee stock ownership of more than five per cent of the market value of stock outstanding.[5] The total amount of stock distributed among workers thruout industry has been very large, but it is impossible to give an accurate estimate because of the practice of including in the data available, the stock purchases of high-salaried officials.

The Dennison Manufacturing Company Plan.[6]—A brief description of one well known co-partnership plan that has been unusually successful, will assist in obtaining a better understanding of this form of industrial democracy. Mr. Henry Dennison has sought sincerely to promote democratic relations in the Dennison Manufacturing Company. The plan is a combination of the shop committee and works council organization with the co-partnership idea. A system of committees takes care of collective bargaining and the disposition of grievances that may arise. The interesting part of this plan is the way the corporation is controlled. With the inauguration of the plan, all the voting common stock held by investors was bought out by the issue of 8 per cent cumulative preferred stock. "The actual control of the Company was vested in the managerial employees, who reinvested the profits in the business, but received in lieu thereof Managerial Industrial Partnership, or Common Stock, which carried the voting rights

[4] Dale Yoder, *Labor Economics and Labor Problems*, p. 580.

[5] *Ibid.*

[6] Material adapted from W. Jett Lauck, *Political and Industrial Democracy* (1926), pp. 194–201. Recent status from personal correspondence.

in the corporation, and which paid cash dividends. In 1919, a system of employee representation and participation in profits was adopted and put into effect the following year thru a plan which had been formulated by the employees themselves. This established an industrial council system of representative government, giving a share in earnings, but no stock voting-rights, to the employees."[7] Under the plan, there are three classes of employees—managerial industrial partners, employee industrial partners, and all other employees. To become a managerial industrial partner, an employee must have been in the company's service five years and have shown a high degree of managing ability, imagination, or business judgment. There are now about 400 such partners. In case the company fails to pay 4 per cent on first preferred stock for one year, or 6 per cent for two years in succession, the managerial industrial partners lose their right to appoint the board of directors temporarily, the right then passing to the first preferred stockholders. In case of failure to pay 8 per cent for four years successively, their rights are lost permanently to the first preferred. Employees of three years' standing are eligible for employee industrial partnership, which carries no right to vote for company directors, but gives a share in management thru representation on works councils and a right to participate in the profits of the company. In 1928 an Investor's Advisory Council was established composed of five men outside the company's ranks, chosen for their knowledge of business and investments. This council advises the Board of Directors and represents the interests of the non-voting stockholders,—those owning debentures and preferred stock. No discrimination is to be made against trade union membership or other trade affiliations, and the trade union agreements in force at the time were not to be superseded by the coöperative plan. The plan is coördinated with a well developed plant personnel policy providing for group service features, such as sick and death benefit associations, credit service, saving funds, and other welfare activities. The Dennison Manufacturing Company plan has stood the test of depression in a very satisfactory manner.

The Future of Co-partnership.—The depression has had a ruinous effect upon many of the co-partnership plans in operation. Workers have not only suffered unemployment, but have in addition lost their savings thru the severe decline in security prices.[8] Many authorities have therefore expressed serious doubts as to the merits of employee stock ownership. It is asserted that whatever the gains in securing the coöperation of workers by stock purchases in prosperity, the dissatisfaction and suspicion of unfair dealing created by the loss of savings in depression, more than counterbalance. Experience thus far, however, warrants some definite conclusions

[7] *Ibid.*, p. 194.

[8] See Helen Baker, *Statistical Analysis of Twenty Stock Purchase Plans 1925–1932, Princeton University Publication, Industrial Section* (1932).

as to the manner in which the most satisfactory results can be obtained, if co-partnership is to be further developed.

With but one important exception, that of the A. Nash Company, no co-partnership plan has been established that has been built on the trade union organization.[9] In some plans, for example, that of the Dennison Manufacturing Company, it is provided that there shall be no discrimination against union men, but they are nevertheless built independent of the union organization. On the other hand, many are decidedly anti-union in spirit; they were formed to curtail and even eliminate, if possible, the influence of organized labor. The plans that have been most successful have been those fostered by men of unusual capacity, possessing high qualities of leadership and great ability to instil confidence in subordinates. This, of course, casts some doubt on the future value of the results, for success may be due, not to the type of plan in use, but to the capacity of the individuals standing behind it. As in every other form of human organization, it is not so much the form as the spirit that counts. The outstanding weakness at the present time is the failure to recognize the trade union movement. The employee organizations established under the co-partnership plans, labelled company unions by organized labor, are viewed with contempt. On this account the co-partnership plan starts out under a serious handicap. It may be (as many employers like to believe) that the trade union is destined to disappear in the future thru the establishment of organizations within a single plant, operating under some form of joint control. But until a long period of actual experimentation demonstrates beyond a reasonable doubt that such will be the case, labor cannot be expected to give up trade unionism, purchased at a heavy price over a long period of time.

At present, it would appear that co-partnership plans should recognize union organizations and build upon them. The success of the union-management coöperative plan indicates this to be the desirable method of procedure. It is to be hoped that the experiments now being made will be given every opportunity to prove their worth, for the co-partnership idea holds out a great hope for creating a fundamental change in the organization of modern industry. The solution of the problem of the relations between "labor and capital" will contribute much towards the efficient operation of industry. The pioneers in this field deserve our most sincere cooperation and support.

Summary

To establish industrial peace requires not only a plan for the settlement of industrial disputes, but also the satisfaction of labor's demands for a

[9] W. Jett Lauck, *op. cit.*, p. 244.

partial voice in the control of industry. Attempts to give labor complete control thru producers' coöperation have not been successful. Some employers have sought to meet the need by systems of profit sharing; that is, the rewarding of employees with a share in the profits, in addition to their regular wages. Real profit sharing should: (1) make a distribution on a previously agreed basis; (2) distribute a sum *in addition to* the prevailing regular wage; (3) distribute a sum large enough to attract the workers' interest; and (4) be constructed to meet the specific needs and purposes for which it was established. Bonus and stock distributions, while not strictly profit sharing, are often used and labelled as such. The primary purposes of profit sharing are to stimulate the worker to greater effort, and, by emphasis on seniority, to reduce labor turnover. The chief defects are that: (1) the individual worker fails to see a connection between his own effort and his wage; and (2) many factors that affect profits are completely outside the workers' control. Organized labor has looked with disfavor on profit sharing schemes. Most of the experiments with this device have eventually failed,—the few successes being attributable to the unusual ability of the enterprizers behind them. There appears to be little hope for progress in this direction in the near future.

Business leaders have opposed the extension of a partial voice in management to labor on the grounds that: (1) the enterprizer's right to manage his own business in his own way is interfered with; (2) only those who *own* and *assume risk,* should control and manage; and (3) the concentration of control is far more efficient than the diffusion of control in a business enterprize. In favor of joint control it is said that: (1) workers *do* assume risk (even financial risk) in industry; (2) the incentive to labor to "go slow" or "soldier" in industry would be reduced; (3) the assumption of management responsibility by labor will temper its demand; (4) a better morale would be created in industry, for the worker would feel that he is a partner in the enterprize. Joint control can be achieved by the capitalists or owners extending to labor a share in management, or by the workers themselves obtaining a proprietary interest thru the ownership of stock. The best expression of the first form is the shop committee, and of the second, copartnership. A shop committee is an organization of representatives of the employees and (usually) the employers within a single shop or plant. They have grown up outside the organized labor movement and in many cases are formed by employers to challenge organized labor's power. These committees establish machinery for giving labor a small voice in the control of those management policies that directly affect employees, such as discharges, promotions and working conditions; and they also create machinery for the peaceful settlement of industrial disputes thru conciliation. Properly administered, they give the worker a feeling that he is playing a real part in the plant organization. Their chief difficulties have been the opposition of

organized labor (directed especially against the company union idea), and the danger of domination, or even intimidation of committee representatives by the management. The Whitley councils in Great Britain are built on the existing union organization and are organized in industries as a whole rather than in individual plants. While they spread rapidly at first, they are losing popularity at present. Union-management coöperation in this country is built on the union organization, and has been successful in bringing about an interest on the part of the workers in improving the efficiency of industry. The experiment should be watched with sympathetic interest. Co-partnership plans combine shop committees with the ownership of voting stock by the employees. In a few cases the employees own the largest block of stock outstanding. Stock is sometimes given the employees as a bonus; sometimes employees are permitted to subscribe at below the market rate; and in other cases, management contributes towards the purchase of the stock. Under some plans the individual worker owns the stock, while in other cases the stock owned by the employees is held by an association of the employees. The latter method gives greater management power to the workers. Plans differ from plant to plant. Co-partnership plans should recognize labor union organizations and build upon them. At present this is rarely the case.

SUGGESTIONS FOR FURTHER READING

In writing the profit-sharing section of this chapter, A. W. Burritt *et al., Profit Sharing* (1920), and G. James *et al., Profit Sharing and Stock Ownership* (1926), were of great assistance. For an analysis of the experience with shop committees and Whitley councils in England see *Survey of Industrial Relations, Report of Parliamentary Committee on Industry and Trade* (1926), Chap. V. The field of co-partnership is interestingly, tho very optimistically, described by W. Jett Lauck in *Political and Industrial Democracy, 1776–1926* (1927). Mr. Lauck's book was of great help in writing the paragraphs on co-partnership. E. R. Burton, *Employee Representation* (1926), and Paul Gemmill, *Present Day Labor Relations* (1929), are excellent studies of joint control. For a summary of the various plans of stock ownership in operation in the United States, see R. F. Foerster and E. H. Dietel, *Employee Stock Ownership in the United States* (1926). The *Bulletin* of the Taylor Society, February 1926, is devoted to a description of union-management coöperation. See also, L. A. Wood, *Union-Management Coöperation on the Railroads* (1931). A splendid brief treatment of joint control is that of D. H. Robertson, *The Control of Industry* (1923), Chap. XI. Three stimulating brief discussions are Solomon Blum, *Labor Economics* (1925), Chap. XII; E. E. Cummins, *The Labor Problem in the United States* (1931), Chap. XV; and Dale Yoder, *Labor Economics and Labor Problems* (1933), Chaps. XVIII and XX.

CHAPTER IX

SOCIAL SECURITY

A. Workers' Insecurity

Workers as Risk-Bearers.—Investors and business enterprizers are often represented as the chief risk-bearers in industry. However, this is a one-sided picture which overlooks the very real hazards which confront the wage-earning classes. The risks assumed by workers are quite as imminent as, and in some respects more serious than, those of property owners. The latter, indeed, face the possible loss of part or all of their property if their business ventures are unsuccessful, but seldom are they completely ruined by such misfortunes. Moreover, the business man is often able to shift a considerable portion of his risks to his employees, for one of the first things he does when times are bad is to lay off a part of his labor force, thereby reducing his own losses at their expense. At such times other employment may not be obtainable. The men laid off are then confronted with the painful problem of providing for themselves and their families without earnings. With their small savings soon exhausted, they are faced with the alternative of starving or appealing for charitable relief. In addition to unemployment, which may arise from numerous causes, industrial workers are subject to other dangers, such as the occurrence of diseases growing out of the nature of their occupations, and loss of life or limb from accidents which occur in connection with their work. These catastrophes are very serious, for they may leave their victims permanently disabled and with their earning capacity very much reduced or entirely gone. Society has been slow to recognize the importance of the problem created by these hazards, regarding the matter as an individual one with which it need not concern itself; but gradually it has become evident that something ought to be done to protect the wage-earners from loss and dependency growing out of such causes. It is such protection that is implied by the term "social security."

Industrial Accidents and Occupational Diseases.—In most industrial occupations the employees are in constant danger of being injured from one kind of accident or another. A hand or an arm can be mangled in whirring machinery; eyes may be blinded by explosions and flying specks of metal; skulls may be fractured or necks broken by falls from a building under construction; rock slides and escaping gases are an ever-present threat

to miners; railway workers may be killed or maimed in train wrecks. Each industry has its own particular hazards. The number of accidents from such causes is very large. No less than 25,000 deaths, an equal number of permanent disabilties, and nearly two million injuries incapacitating the victims for more than three days each result each year from industrial accidents in the United States.

Illness is another calamity that is often a direct result of employment. There are many kinds of occupational disease which arise out of conditions under which people work. Working in air that is filled with dust or mineral particles subjects the wage-earner to the risk of contracting tuberculosis or silicosis. The handling of cattle sometimes causes the disease known as trachoma. Exposure to heat and cold may lead to pneumonia. Working with radium, as in producing luminous dials for clocks and watches, introduces a dangerous poison into the system which is likely to prove fatal. The manufacture of tetra-ethyl lead, now used so widely in automobile gasolines, may cause a kind of insanity, which has also sometimes proved fatal. A great many other examples could be cited, from a wide variety of occupations.

For many years it was the practice in this country to leave the worker to shift for himself when beset by these disasters. Under the common law, he might sue his employer for damages, but if the employer could show that the worker, thru his own negligence, contributed in any way to the injury, or that a fellow employee was partly responsible, the injured worker could not recover. Since something of the sort could be shown in most cases, the employer usually escaped responsibility. The worker then had to foot his own medical bills, suffer a loss in wages during his period of incapacity, and perhaps be permanently unable to resume his former, or even any, occupation. So it became apparent that, if workers were to be adequately protected and cared for, society must find some means of doing it. We shall presently learn how this has been partly accomplished.

Premature Old Age.—The pace of mechanized production is progressively shortening the life of industrial workers. The nervous strain of monotonous, repetitive labor, performed day in and day out at high speed under factory conditions, eventually weakens the human system. This strain is often aggravated by the speeding up of production during the seasonal peaks of activity which are common in almost every industry. The situation has become such that many employers will not take on a new employee who has reached middle age in life. In a recent study, made by the National Association of Manufacturers, 30 per cent of the firms who replied to a questionnaire admitted an upper age limit for hiring workers ranging from 25 to 45 years.[1] At the very time when this shortening of the working life is going on, medical science and modern sanitation are increasing the average life expectancy of the American people, thus leaving a longer period of old age to be faced

[1] Quoted in Harry W. Laidler, *A Program for Modern America* (1936), p. 92.

after the working period is over. Among the well-to-do, retirement at a moderately early age does not present a serious economic problem, but the average workingman's earnings are small, and it is difficult for him to lay by sufficient savings to provide for his support when the feebleness of later life renders him no longer fit for remunerative employment. If this problem were simply an inevitable result of having reached advanced years of life, it might be regarded primarily as a question of charity; but the fact that men are retired so early, and that the retirement comes out of the industrial methods that now prevail, raises the issue of whether we are not wasting man-power, and whether employers are not escaping from a burden for which they are largely responsible. In any event, it is a social problem which cannot be overlooked in any program designed to improve the well-being of the whole of society.

Loss of Market for Skill, Thru Technological Change.—Altho the workingman does not usually have much, if any, material capital invested in industry, he does have a kind of human capital, embodied in his own skill, which represents an important form of investment by him. He may have devoted years of training and experience to the acquiring of this skill, and the higher wages he is able to earn because of it represent a return on his investment, comparable in some respects to interest and dividends of the capitalist. The market for this skill may be lost thru changes in the nature of the commodities used in everyday life. When the horse and carriage gave way to the automobile, blacksmiths, harness-makers and the like were no longer needed. To be sure, there arose a new demand for skilled workmen in the automotive industries far exceeding the former demand for the displaced wage-earners, but a blacksmith or a harness maker, especially if no longer young, could hardly qualify for the new occupations. He was faced with a new situation, in which the skill which for many years had supported him at good wages was no longer demanded, and he probably had to accept unskilled employment where his earnings were considerably less. The replacement of kerosense lamps by electric lights, of phonographs by radios, of coal-burning furnaces by oil burners, and many similar developments, have meant loss of earning power for thousands of employees whose special qualifications lost a market thru the disappearance of the industries where they were in demand. It is the same when a change is made, not in the product itself, but in the method of producing it. There is hardly an industry in which new machine processes are not continually displacing some form or other of skilled labor. The hand compositor finds himself replaced by the linotypist, the glass blower gives way to the glass-blowing machine operator, the skilled lacemaker yields to lace-making machinery, and so on. In every such case a difficult problem of readjustment faces the displaced workers.

Unemployment: The Problem.—Perhaps the most serious difficulty which confronts the wage-earner is unemployment. The failure of our eco-

nomic organization to utilize fully all the labor power at its disposal constitutes one of its most glaring defects. If the economic process were perfectly efficient, every able-bodied adult whose time was not needed in the home would be kept fully employed. Unfortunately, such a state of full employment is far from actual attainment. There is always a considerable amount of unemployment, which in recent years has reached alarming proportions. It is difficult to give any figures for the whole of the United States which can be relied upon, but some estimates have been made which give a rough indication. According to these estimates, it appears that we always have at least one million idle workers, and during business depressions the number rises to many times that figure. In the years from 1930 to 1938 the number of unemployed was variously estimated at from eleven to fifteen millions, out of a working population of about fifty millions.

This unemployed labor is just so much idle productive power going to waste; and to the extent that it exists, the income of society is reduced. It is not the fault of the workers. There are, of course, some people who are unable or unwilling to work, but these are not what we mean by the unemployed. Unemployment, strictly construed, refers to enforced idleness on the part of the workmen because industry fails to provide them with jobs.

The trouble does not consist in a lack of sufficient total demand for labor. In the long run, we cannot have more workers than industry as a whole can use, because each worker provides the means for his own employment. Modern industry is built upon a system of exchange, where each produces his own specialty and exchanges it for the products of others. Practically every product is brought into existence for the purpose of making such an exchange. Consequently, every product is a demand for some other product, and as long as human wants are not completely satiated, there will always be a market for as many products as can be brought into being. Looking at the monetary aspect of the problem, each new worker in industry will add to the monetary demand an amount equivalent to his own wages. A new worker employed requires food, clothing, and other economic goods which would not have been needed if that worker were not there. If he is paid a wage of $2,000, he will spend it in the purchase of such goods. At the same time that he is adding goods to production equivalent to his wage he is also adding that much to the demand. Consequently, it is impossible for the total supply of labor ever to outrun the total demand for it. Unemployment cannot be attributed to an oversupply of labor. What, then, are its causes?

Unemployment: Its Causes.—The most serious cause of unemployment is the occurrence of *business depressions*. These bring about what is known as cyclical unemployment. In these depressions business men are unable to sell their goods at profitable prices, and are forced to reduce their output, or close their plants entirely. As a result, workmen are employed only on part time or are laid off altogether. Since the condition is so general in

industry, the workers are helpless, it being quite impossible for those laid off in one occupation to find employment in another. Since this is only one phase of a more general business problem, we shall not attempt to analyze it here; the whole question of business fluctuations will be discussed in Chapter XIV.

Another important cause of unemployment is to be found in *technological changes*. It has already been pointed out that, whenever labor-saving machinery is introduced into industry or new methods of management are adopted which increase the output of labor, there is a tendency for a certain number of workers to be displaced. Developments of this character have been so marked in this country since the World War that many people believe it to be a major cause for the great increase in unemployment which has been characteristic of this period. Orthodox economic theory teaches that technological unemployment is only temporary in character. The reasoning in support of this is as follows: New machinery or improved methods of the "labor-saving" sort effect a reduction in costs of production which will either be passed on to consumers, in lower prices, or will accrue to the producers, in increased profits. If the consumer gets the benefit, he will need less of his income than before to buy the now cheaper commodities. He will use the income thus released, either to buy more of those same commodities, or to purchase other goods of which he was formerly deprived. If the producer gets the saving, he will spend his increased profits, either by new investments in capital goods, or by consuming more commodities. In either case, therefore, there is an increased demand for goods and an increased demand for labor with which to produce those goods. Furthermore, the competition of the displaced workers for jobs should reduce somewhat the prevailing rate of wages, and thus lead to an increase in the effective demand for labor. As a result of these influences, it is argued that the displaced workers must eventually be reabsorbed into industry. This reasoning is logically sound, but it must not be forgotten that this process of reabsorption takes time. In a period of rapid technological progress the rate of dismissal of employees may well exceed the rate of their reëmployment. We might then have a problem of increasing unemployment, extending over a number of years, which would not be taken care of by the ordinary processes of economic readjustment.

A less serious form of unemployment results from *seasonal changes* in industry. In agriculture, for instance, the demand for labor is slack during the winter and at its peak during the harvest season. In 1920 and 1921, according to a careful study,[2] the difference between the number of workers employed in this branch of industry during its peak and dull seasons was approximately a million persons. Every year, when the harvest is over, approximately that many agricultural employees are laid off, and must find a means of livelihood elsewhere during the rest of the year. There are few industries which do not show a similar tendency, in greater or less degree.

[2] W. I. King, *Employment, Hours and Earnings in Prosperity and Depression* (1923), p. 30.

There is a good deal of *frictional unemployment* which is due to the inelasticity of the economic process, to the time lags and lack of mobility which prevent perfect adjustments of demand and supply. The slowness with which labor displaced by technological changes is reabsorbed is one illustration of such time lags. The fact that the aggregate demand and the aggregate supply of labor consist of many specific demands and supplies, when coupled with this idea of friction, helps to explain why unemployment persists in spite of the truth that there is no general oversupply of labor. Demand for labor is irregular from month to month, but the supply changes rather slowly; and there may be an oversupply of workers in one city at the very time that there is a shortage somewhere else. Also, in a given place, a condition of unemployment may exist in one industry simultaneously with a labor shortage in another industry. In other words, unemployment may be due to specific maladjustments in the labor market from industry to industry, from place to place, or from time to time. In a perfectly elastic economic system labor would move instantly from a place or trade where it was in excess to the place or trade where there was a deficiency, just as water would quickly come to the same level in a number of containers of different sizes and shapes if they were all connected by unobstructed pipes. There would then be no frictional unemployment; but such a perfect adjustment is impossible in the actual world.

Because of the continual variations in the demand for labor which result from seasonal and random variations in production, there tends to accumulate in each trade and in each locality a larger number of workers than can be continually employed there. Attracted into the industry during one of its peak periods, these workers look to it for employment, and remain there even when unemployed during dull periods, waiting for renewed activity in the business to bring them employment again. So, there tends to accumulate about each industry a *labor reserve* sufficient to provide for the needs of the trade during its periods of greatest activity. To some extent there is even a reserve attached to particular plants.

Keynes' Theory of Unemployment.—The British economist J. M. Keynes has recently offered a new theory of unemployment. He disputes the proposition, stated above, that there is no lack of sufficient demand for labor. According to his theory, employment depends upon the volume of investment, for it is the funds expended by business men in production that constitute the principal demand for workers. Investment, in turn, depends upon the relation between the prospective earnings of capital (based on its marginal productivity or "efficiency") and the rate of interest. In a progressive society, where incomes are increasing, people tend to save more; but, since an increase in capital reduces its marginal productivity, these savings cannot be invested profitably in capital equipment unless there is a reduction in the rate of interest. He believes that the rate of interest is prevented from falling by psychological factors. Therefore, there is an excess of savings which are

hoarded, instead of being invested. This hoarding withdraws money from circulation, and so reduces the total monetary demand for goods and labor. Under these circumstances, full employment would only be possible if money wages were reduced; but labor resists the cutting of money wages so tenaciously that this cannot take place. There ensues a general decline in economic activity, until an equilibrium is reached where the income of the community has been so reduced that there is no longer a surplus of savings, but in which many workers are more or less permanently unemployed.

This theory has been widely discussed by economists, and seriously criticized. Altho it may contain some elements of truth, it would be unwise to base a program for preventing unemployment upon it, unless and until it has much wider support.

B. The Reduction of Workers' Risks

The Prevention of Industrial Accidents and Disease.—Industrial accidents and occupational diseases can be very much reduced by preventive measures. Accidents can be kept at a minimum by the use of safety devices, such as guards to prevent clothing or fingers from being caught in whirring machinery, goggles and masks to keep flying particles out of eyes, safety gates on elevator shafts, and so on. Much can also be done thru a program of safety education directed at both employers and employees, and by the proper training of workers in the handling of dangerous materials and machinery. The toll of occupational disease can be materially curtailed by surrounding the workers with sanitary and healthful conditions in the factory, and by frequent medical inspection to discover incipient trouble and to prescribe proper preventive measures before illness assumes a serious form. Unfortunately, not all employers can be relied upon to take such measures voluntarily. There are always some progressive ones who will do so on their own initiative, but the laggards and less considerate business men will not, unless compulsion is used. Therefore, it is important that laws should require the use of protective devices and the maintenance of healthful working conditions and reasonable hours of employment, and that these laws should be supplemented by factory and mine inspection at frequent intervals, to see to it that their provisions are carried out. Such legal machinery is not only a matter of humanitarian sentiment, but it is essential for economic efficiency, for it prevents waste and loss of human producers and conserves them to increase the productive output of our industry. The nature of existing legislation with regard to provision for industrial safety will be more fully discussed in Chapter XXV.

Vocational Training and Reëducation.—The development of an adequate system of industrial training for both young people and adults would aid in the solution of a number of the problems raised in the first part of this chapter. Such training could be utilized to equip the victims of industrial

accidents for new jobs compatible with their physical handicaps. By diversifying the skill of workers, so that they could qualify for more than one occupation, it would eliminate the dependence of an individual on a single industry and might thereby help to reduce seasonal unemployment. An important contribution which such a program could make would be to equip all workers for some definite trade or trades. It is among the unskilled, who lack such training, that irregularity of employment is most prevalent. Much progress is being made along this line thru compulsory education laws which prevent children from leaving school at an early age in order to enter unskilled occupations. In many of our public school systems, also, vocational courses are being introduced, which at least start the boys and girls in a course of training for some skilled trade. The development of continuation schools, carried out thru coöperation of employers and school officers, which carry on the education of young workers for some months or years after they leave school, is likewise a helpful step in preventing them from falling into the ranks of unskilled casual workers. It is also possible to utilize the idle time of adults during periods of unemployment by placing them in classes which will train them, either for more skilled work than that which they have been doing, or for work of equal skill in some other industry, in case the demand for their type of labor has disappeared.

Vocational training of adults may likewise be of some assistance in making workers who are past middle age valuable to employers. However, this has its limits, for training alone will not make a person fit for work if his health has been broken down by the fast pace of industry—that calls for more healthful conditions of work, or, possibly, a working day of shorter length. Neither will it make employers willing to hire older workers if they have a preference for younger ones—that may call for some reëducation of employers. The major problem of finding jobs for sub-standard workers, whether their sub-standard status be due to lack of training, to accident, to illness, or to old age, is to create a demand for labor so insistent that employers will be forced to hire them for lack of available workers. This brings us squarely face to face with the problem of unemployment, for so long as the effective supply of labor exceeds the demand for it, employers will pursue a selective policy of hiring, under which the better trained and more efficient workers, for the most part, will continue to hold their jobs, while those who are least efficient will be unemployed. Let the demand for labor be sufficiently strong, however, and the less efficient will be employed at such tasks as they are capable of performing.

Organizing the Labor Market.—In so far as unemployment is of a seasonal and frictional character, a better organization of the labor market could do much to reduce it. The labor market at the present time is woefully disorganized. There is no carefully planned machinery for establishing contacts between employers and those who are seeking employment. If a manu-

facturer desires to take on more hands, he advertizes the fact in the newspapers, and dozens or hundreds of them come flocking to his factory gates. If a laborer is seeking a job, he reads the newspaper advertizements and goes from plant to plant until he eventually finds employment—if there is any to be had. In this process there is much waste and inefficiency. A number of employers may be advertizing for the same kind of workers on the same day, and the latter flock to each in turn, wasting much time and energy. Each employer must interview a great many men before he finds those who are suited to his needs, and each man may have to submit himself to many employers. If there is no work in one community, there are almost no facilities for bringing laborers into contact with opportunities in other communities. The lack of system results in much lost time and energy and contributes to that large reserve of unemployed labor which has previously been described.

All this is in marked contrast to the way we handle commodities. The market for some of our staple products, such as wheat and cotton, is organized into elaborate produce exchanges, where buyers and sellers get together and transact a huge volume of business very quickly and easily. The commodities are standardized into grades, so that they can be bought by number without the purchaser even having to inspect them for quality.

Something of the same sort could be made possible in the employment of labor. Exchanges could be set up where men would register for work and employers would go for their men. The exchange would classify the workers according to their trade, skill, experience, etc., and only those need be interviewed by the employer who had already been selected with a view to his requirements. Such a system of exchanges, if organized on a national scale, could dovetail the demand for labor in seasonal trades in such a way that workers laid off in one industry during its period of inactivity could be shifted to some other industry that had its busy season at that time, thus reducing seasonal employment to a minimum. Thru its facilities for gathering information as to the state of the demand for labor in various parts of the country, it could assist in transferring labor from regions where there was unemployment to regions where there was a shortage of labor. By such means the size of the labor reserve, with its waste of labor power, could be made very much smaller.

Private employment agencies, which charge a fee for their services, have existed for many years, but they are local and their operations necessarily very much restricted. Employers' associations have sometimes organized similar agencies, somewhat wider in scope. There are likewise employment bureaus maintained by particular trade unions, and some others supported by philanthropic organizations. All of these usually specialize in employment of a particular type or types, and their field is limited to a given locality. A really adequate, comprehensive organization of the labor market is only to be obtained by a well coördinated national system of employment offices main-

tained by the government. Local exchanges would handle most of the cases, but from time to time there would appear a shortage of labor in one region and a surplus in another. State exchanges, in collaboration with a national employment office, could arrange for a transfer. Altho the immobility of labor would offer some difficulties, it would not prove an insuperable obstacle if it were intelligently handled.

A national system of employment exchanges of the sort described was first established by England in connection with its system of unemployment insurance. Sixty-one exchanges were established under this system in February 1910, and by 1923 the number had grown to 1428. They have done excellent work, not only locally, but in the transferring of workers from one district of England to another. Systems of public labor exchanges have also been established in Canada, Norway, Denmark, Spain, France, Sweden, Italy, and Switzerland.

Machinery for the establishment of a similar system in the United States was provided by the passage of the Wagner-Peyser Act in 1933. By this Act, three million dollars are made available annually for distribution to the states to assist in maintaining and extending such public employment offices as have already been established. An additional one million dollars a year is provided for administrative expenses in connection with the coördination of existing state agencies and the formation of new offices. The federal government agrees to match funds appropriated for this purpose by the states, and the whole is administered by the Director of the United States Employment Service (an organization established during the World War, but weakened by lack of sufficient appropriations to support it). The system provides free placement for workers and is expected to facilitate the transfer of workers from surplus to shortage areas. Where state programs cannot be established, organizations under direct federal operation are set up. This service has so far experienced considerable success in placing individuals registered with it, but has been largely dependent upon government projects. Little more than a third of its total placements have been in private enterprize. However, if the organization is well administered and is given the support which it needs, we may well be on the road toward the establishment of a really efficient national system of labor exchanges in this country.

While the development of this system will go far toward solving the problem of seasonal and frictional unemployment, it cannot find jobs for workers where no such jobs exist. Therefore, it will prove inadequate to deal with the problem of unemployment during business depressions, and it cannot prevent that lag in the reabsorption of workers displaced by the mechanization of industry which leads to technological unemployment. The problem of business depressions is more than an employment problem; it involves the whole functioning of the economic process. It is one of the major problems of applied economics; therefore a separate chapter will be devoted to it in Part III

of this volume. The problem of technological change is almost equally difficult. It calls for controlling the direction and speed of economic progress,—in short, for the planning of our whole economy. Such planning will be reserved for discussion in our concluding chapter. Since neither the problem of business depressions nor of technological unemployment is likely to be solved in the very near future, we must be content, for the present, to develop such palliatives as may be available to meet the situation. One such palliative which has been suggested is reducing the length of the working week.

Reducing Hours of Work.—It has frequently been urged that unemployment could be reduced by shortening the length of the working week. Indeed, the codes set up under the now abandoned National Industrial Recovery Act contained provisions limiting hours of work to forty per week, more or less, and in 1938 a law was passed setting a forty-hour working week as the nation-wide maximum eventually to be reached in this country.[3] The pressure for such shortening of working time is based at least partly on the theory that it would increase the demand for labor, and thereby help to absorb into industry the millions of workers now unemployed.

Now it is true that in a period of unemployment, when, for the time being, there is not enough work to go around, some work for the unemployed can be made available by shortening the working time of those who have jobs, provided there is no increase in wages per hour. In order to maintain the current output of goods, employers will then have to hire more laborers, which they can readily do because their total wage disbursements will be no greater than before. By this device what work is available will be spread over a greater number of persons, those who were formerly employed on full time being forced, by part-time employment, to share their earnings with those who were formerly unemployed. During a period of widespread cyclical or technological unemployment this a defensible policy, for it is better to keep most of the people working at reduced earnings than to have some working full time at full wages, while others are out of work and earning nothing. However, it is usually proposed, by the sponsors of the shorter work week, to keep weekly wages the same as before, increasing the wage per hour to compensate for the lesser number of hours. This is a mistaken policy, for it would defeat the object of giving work to a greater number of persons. Unless hours of work have hitherto been so long as to impair the efficiency of labor, there is not much reason to suppose that the reduction of hours will be accompanied by an increase in hourly output. Therefore, employers will have higher labor costs per unit of product, and will be forced to raise prices correspondingly. This means that consumers will buy less goods than before, so that effective demand will be reduced in proportion to the shortening of hours. Moreover, the higher costs of labor are likely to stimulate the introduction of labor-saving devices. So, it appears that reducing hours of work not only will not

[3] This law is discussed more fully in Chapter XXV.

increase the demand for labor, but may even reduce it. At best it is a palliative—a temporary expedient to be resorted to in emergency for the purpose of distributing more equitably the burden of unemployment.

This is not to say that there is no justification on other grounds for shortening the working week.[4] Where hours of work are so long as to impair the health of the workers they should certainly be reduced. Moreover, with the greater output of material goods which modern production methods make possible, not so much labor has to be devoted to providing the necessities of life. There is more opportunity for recreation and leisure, which is a sufficient reason for a permanent reduction in working hours. But let the case for the shorter week rest on that basis, not on the fallacious view, now so widely prevalent, that the market for labor is permanently limited, and that therefore there is no longer any hope of full time employment for everybody.

Public Works.—It has been indicated that the problem of the business cycle will be discussed in a later chapter. However, it is appropriate to consider here one measure which has lately been much used to combat the unemployment caused by business depressions. This is the carrying on of public works by governmental bodies in order to provide jobs for those who are not taken care of by private enterprizes. City, state and national governments are continually authorizing large construction projects, such as the erection of public buildings, bridges, highways, dams, etc., which call for the employment of thousands of workers. It has been suggested that if these projects were planned in advance, the actual work of construction could be postponed until a period of business depression, at which time the expenditures of government would offset in part the decline in private spending. Then, when business recovered from depression, the government program could be tapered off. In this way the careful timing of public works could be dovetailed with the ups and downs of the business cycle, helping to stabilize business activity in general, as well as employment.

Some application of this principle has been made in England and other European countries. In this country, it was used to a limited extent in 1921, and in 1931 Congress made a further step in this direction by creating a Federal Employment Stabilization Board. A more ambitious program was undertaken in the Great Depression, when Congress authorized the expenditure of several billion dollars for public works, to be directed by the Public Works Administration (popularly known as PWA). Insufficient preparation, red tape, and a desire to avoid waste caused much delay in putting the program into effect, so that at its peak in 1934 only about 600,000 men had been put to work, which was too small a proportion of the several million persons then unemployed to satisfy the critics of the policy. Besides, the program did not reach all types of people in need of work, for much of the unemployment was among people who could not be used in construction

[4] See the further discussion of this topic in Chapter XXV.

projects. Therefore, in 1935 the PWA program was somewhat curtailed, and a Works Progress Administration (WPA) was set up to promote scattered small projects, of the sort normally undertaken by municipalities, in which direct labor costs predominated. Here and there roads were improved, sewers installed, etc., and civic orchestras, theatrical enterprizes and research investigations were promoted in order to give employment to "white collar" workers. This program was more effective, so that by December 1937 there were over one million and a half workers on the WPA payrolls, and just over 100,000 on the PWA. Even this fell far short of meeting the unemployment problem, despite the large expenditures. Our experience indicates that if public works projects are to be used promptly and effectively to meet conditions of unemployment, they must be based on intelligent, far-sighted planning by government agencies. Politicians will have to be restrained from reckless spending of public moneys in times of prosperity in order to accumulate reserve funds for construction in times of depression. The problems of public finance involved will be reserved for discussion in a later chapter.

What Management Can Do.—Individual employers can do much to meet some of the problems of workers' insecurity. We have seen that they can introduce safety measures which will reduce the number of accidents, and more healthful working conditions which will keep down the dangers of occupational diseases. They can also take measures to reduce seasonal and casual unemployment, by adopting policies which will tend to stabilize their activities. They can plan ahead so as to anticipate peak demands by producing surplus stocks during dull periods. The inducement of lower prices can be used to persuade customers to purchase in off-peak seasons. Extensive advertizing can sometimes build up an all-year-round demand for a product which would otherwise be seasonal. It is also possible for concerns to take on side lines which dovetail with the dull period of their principal products. They can follow careful employment and placement policies which will reduce the turnover of workers in their employ, and thus help to reduce the size of the labor reserve for their particular plants. Some of these things it is to the advantage of the employers to do voluntarily. The efficiency movement in industrial management is doing much to promote measures of this kind. But management will never do all that is possible along these lines until some kind of pressure is put upon it to do so.

C. Social Insurance

Business Costs and Social Costs.—In spite of all that can be done along the lines suggested above to reduce the risks of workingmen, they cannot be wholly eliminated. Some incapacity resulting from accidents and occupational diseases, some old age dependency, and some unemployment will still remain. In an individualistic society, as we have seen, the burden of

meeting these risks falls upon the workers, who are often either unable or unwilling adequately to provide for them. The great masses of workingmen do not look ahead to the future with as much foresight as they might, and are inclined not to anticipate the distress that may come upon them from unforeseen misfortunes. Moreover, the incomes of wage-earners are often too small for them to accumulate sufficient savings to shoulder this burden. The result is that, when disaster occurs they must rely upon private philanthropy or public charity. So the burden of caring for them constitutes a social cost which must be met by the community in one way or another. Would it not be better for these costs to be assumed by industry? Since all of the risks with which we are here concerned arise out of industrial conditions surrounding the workers' employment, it would be logical to charge the cost of supporting these workers to the industries concerned. Just as the expense of repairing a machine which breaks down in use constitutes a cost which must be recovered from the price of the commodity, so should the medical expenses of a worker injured in the course of his employment be similarly charged to the cost of production. By similar reasoning the dependency of old age is just as truly an industrial cost as is the depreciation of capital, and the burden of supporting unemployed workers just as truly a cost as the overhead expense of maintaining an idle plant. But these workers' costs do not appear in the accounts of the business man, so long as he is not responsible for paying damages or wages to his workers when they are incapacitated or unemployed. When accidents or illness occur, or when business activity is slack, he lays off the workers and throws the burden of their support upon society. This suggests that we need a device which will convert the social cost of maintaining labor under such conditions into a business cost which will appear in the accounts of the business man. The needs of the worker will then be cared for in a more business-like fashion, and, what is equally important, a strong incentive will be put upon management to reduce such costs to their minimum by preventive measures. Such a device is social insurance.

The Nature of Social Insurance.—The risks of workingmen are in many respects similar to such risks as those of fire and death, which are commonly dealt with by insurance. The method of insurance is appropriate to meeting any risk that is widely distributed, frequent in occurrence, and capable of being measured statistically. Insurance pools the risks of a great many individuals in a common fund, to which all contribute a small payment, and out of which the losses of particular individuals are paid. By this means the chance of catastrophic loss to particular individuals is transformed into a small regular cost, shared by all those who participate in the insurance project. It is mutual risk-bearing.

When this principle is applied to the risks of workingmen on a large scale, with government encouragement or participation, it is known as

social insurance. Sometimes it is known simply as workingmen's insurance. It is applied to such contingencies as industrial accidents, sickness and death, old age and invalidity, and unemployment. Some forms of workingmen's insurance are voluntary, depending upon the willingness of the workers to pay the premiums to insure themselves, but it has usually been found that this method does not reach the people who need it most. Therefore, compulsory social insurance, in which the government uses its power to see that all the workers needing protection are covered by it, has come into vogue. This appears to be the most satisfactory method of providing for the losses which workingmen suffer from the risks described.

Social insurance also differs from insurance of the ordinary kind in that the cost is not usually borne entirely by the persons insured. Since the employer is partly responsible for the risks run by his employees, it is felt to be just that he should bear a part of the costs of insuring them. Moreover, the employer gains by the better morale and economic well-being of the laborers which such insurance makes possible. The state also sometimes contributes to the insurance funds, because of its interest in this essentially social problem, and because, where such insurance is not provided, the state is likely to have to provide for relief of the poverty that workers' dependency brings.

National Social Insurance Systems.—Compulsory social insurance began in 1883 with the passage of an accident insurance act in Germany under the influence of Bismarck, who sought to combat socialistic propaganda by developing a paternalistic state which would look after the interests of its working classes. The system was soon extended to sickness and old age dependency. Following the example of Germany, other nations adopted similar measures, so that, by the outbreak of the World War, comprehensive systems of national social insurance had become an established institution in most of the countries of Europe, as well as in Australia and New Zealand. As a result of this legislation, fully two-thirds of the persons gainfully employed in Germany and several million workers in Great Britain were under the protection of this insurance. At first the risks covered included only accident, sickness, and old age invalidity, but in 1911 Great Britain adopted its National Insurance Act, which included protection against losses from unemployment also. By 1920 this act had extended its coverage to more than twelve million persons. In the post-war depression Germany also adopted a system of unemployment insurance, and this feature was eventually incorporated into the insurance schemes of most countries. It is to be noted that this legislation was adopted by the central governments, and was nation-wide in its scope.

In these systems, the costs of the insurance are divided among employers, employees, and the state in various ways, according to the risk covered. In the case of accidents, the insurance premiums are usually levied entirely upon

the employer, on the principle that the prevention of accidents is largely within his control, and that the best way of securing such prevention is to make accidents costly for him. In the case of sickness, however, both the employer and the employee are obliged to contribute to the insurance fund a small percentage of their payrolls and wages, respectively, and the state itself usually subsidizes the fund out of its own treasury, so that the expense is borne jointly by the three parties. A similar arrangement prevails with respect to unemployment premiums. In the case of old age retirement, however, there are two different policies. The British countries generally grant an outright state pension to those workers who reach the age of retirement without adequate means of support, but in Germany and the countries which follow its example, the retired workers receive an annuity based on insurance principles and paid out of a fund to which they and their employers, as well as the state, have previously contributed. In most of these systems the insurance funds themselves are administered by the national governments as state enterprizes.

Impartial observers of these systems substantially agree in the judgment that they have been reasonably successful, except in the case of unemployment insurance. None of the unemployment funds was prepared for the extraordinary drains which were made upon them by the serious post-war depression. As a result they ran deficits which had to be made up by loans or outright grants from the state. Altho the payments made to the workers under the insurance plans are very modest, seldom amounting to more than half the wages they have customarily earned, they do assure them a minimum of support during periods when they are unable to earn wages, and they have certain incidental advantages. As a part of his sickness benefits, for instance, the insured worker receives free medical and hospital care, and the health services which have been built up in connection with this insurance have been a valuable feature of the systems. In connection with unemployment insurance, nation-wide systems of labor exchanges have been established which help to organize the labor market along the lines suggested in an earlier paragraph. There is no doubt that social insurance has become a fixed institution in those countries which have experimented with it, so that there is little question about its permanency.

The United States was slow to adopt a similar system, partly because of the stronger hold which the philosophy of individualism has upon our people, and partly because of our peculiar legal institutions. The greater freedom of opportunity and the relatively high wages prevailing in this country seemed to make social insurance less necessary, while our system of state sovereignty made it difficult for the federal government to inaugurate such a scheme. Initiative had to be left to the several states, which were slow to adopt the idea. In spite of these difficulties, considerable progress was made in the development of accident insurance, thru workmen's compensation laws, and

a few states had adopted other forms of social insurance; but not until 1935, with the passage of the Social Security Act, did we make any significant move toward a comprehensive national system of social insurance. These two developments will now be described.

Workmen's Compensation in the United States.—Laws compelling employers to insure their employees against accidents have been declared unconstitutional in the United States, but a way has been found to accomplish the same result by so-called workmen's compensation acts. The first of these was enacted by the New York legislature in 1910. In 1932 all but four states (Arkansas, Florida, Mississippi, and South Carolina) had some form of workmen's compensation legislation. We have seen that it was formerly the law in this country that an employee injured in the course of his work might sue his employer for damages, but if it could be shown that the employee had contributed to the accident by his own negligence, or that a fellow employee had been partly responsible for it, the employer could not be held liable. Consequently, the latter usually escaped the payment of damages. The compensation laws in a number of the states have provided that the employer can no longer make the contributory negligence or fellow workman pleas as a defense. At the same time they give the employer the option of paying compensation at certain rates provided in the law, instead of subjecting himself to suit. With these most effective defenses no longer available, the employer is almost certain to lose any such suits that are brought against him. He usually prefers to pay the compensation provided in the laws, and the most convenient way for him to do this is to insure his accident risks with some insurance company that specializes in that kind of business. The compensation laws frequently provide for the establishment of such companies, or this may be left to private initiative. The amount of the compensation varies with the gravity of the injury sustained, in accordance with a schedule provided in the statute. At present the tendency is to increase compensation, reduce the delay in filing and administering claims, and supervize private casualty companies with greater care than in the past. There is also a trend toward widening the scope of the law to include occupational diseases; a number of states and the federal government are now making no distinction between industrial accidents and other sickness directly attributable to industry. The equalizing of competitive conditions by the adoption of uniform state compensation acts is desirable, but it seems to be unlikely of accomplishment in the immediate future due to the desire of some states to attract industry, even at high social costs.

The Social Security Act.—In spite of the legal difficulties which stood in the way of national social insurance in this country, for years there had been agitation for the development of something comparable to the social insurance systems which prevailed in Europe. When unemployment became so vast in extent during the Great Depression, this agitation came to a head.

The result was the passage in 1935 of the Social Security Act. This act provides, in one way or another, for old age pensions or annuities, unemployment compensation, vocational rehabilitation, security for children, aid to the blind, and extension of the public health services. It also makes a modest contribution to an industrial training program by appropriating two million dollars annually to be distributed to the states for extension of programs of vocational rehabilitation for the physically disabled. This sum is obviously too small to accomplish very much. It is to be noted that accident insurance is not included, presumably because this form of insurance had already been fairly well developed by the states prior to the passage of this law.

In order to avoid the constitutional difficulty of infringing upon state sovereignty, the act allows the several states to formulate their own old age and unemployment insurance systems, but encourages them to conform to certain national requirements by offering a subsidy from the federal insurance funds to those states that conform to certain minimum requirements. For instance, the federal government will contribute as much as fifteen dollars a month per person for old age pensions on condition that the states do likewise, and it will return to the states 90 per cent of the taxes it collects for the social insurance funds for unemployment insurance, if they have satisfactory unemployment insurance systems of their own. These provisions place the states in a position of having to set up social insurance systems which will satisfy the federal requirements if they are to receive any benefit from the taxes levied by the act on employers and employees within the state jurisdictions. The result is that the states have hastened to fall into line with the necessary legislation, so that there is now in effect a widespread system of social insurance in this country, altho it varies considerably in certain details from state to state.

At the head of the system set up by the act is a Social Security Board of three persons, charged with the task of administering the whole program in so far as it lies within federal jurisdiction. It has considerable authority over the state systems of old age pensions and unemployment insurance (altho not as much as some critics think desirable), and it will manage directly the old age annuities plan presently to be described. In addition, it is charged with the task of studying the whole problem of social insurance and making recommendations as to legislation and matters of administrative policy in connection therewith. This body is destined to occupy a position of increasing importance in our government. It already has a large staff which is working at the problems under its jurisdiction. The United States Treasury has custody of the funds collected and held in reserves under the act. These funds will be discussed below.

Old Age Pensions and Annuities under the Act.—The Social Security Act sets up two distinct systems for dealing with old age. The first, *old age assistance,* is a system of outright pensions designed to give immediate

aid to aged individuals already sixty-five years old or more, and who, therefore, are unable to make individual contributions to a reserve fund from which future payments might be made. The Social Security Board is entrusted with the apportionment of a federal subsidy of several million dollars to those states whose old age assistance plans meet certain minimum requirements. The latter are designed to secure centralized and uniform administration of pension plans within the state and to prevent discrimination against applicants for old age assistance. To qualify for federal aid, a state pension plan may not require an age of more than sixty-five years for eligibility, nor that the recipient shall have resided in the particular state more than five years out of the previous nine, nor may it make any provision which excludes a citizen of the United States. Upon approval of a state plan by the Social Security Board, the federal government will match state old age pensions dollar for dollar up to a maximum federal payment of fifteen dollars a month for each dependent sixty-five years old or older. Inmates of public institutions are excluded. In addition, each state receives 5 per cent of the basic subsidy, which need not be matched and may be used for administrative purposes or for direct old age assistance, or both. Under this plan, indigent aged persons will generally receive pensions that will bring their total incomes (from all sources) to thirty dollars per month, for the states are not likely to appropriate more than the federal government, and they must offer fifteen dollars in order to get the full benefit of the subsidy.

The second part of the old age program aims to reduce old age dependency in the future by providing for federal (not state) *old age annuities,* based on insurance principles. This system is compulsory for employees in most of our industries. Every person in the United States sixty-five years old, employed in each of at least five years between December 31, 1936 and his sixty-fifth year, who has received $2,000 or more in wages during that time, is eligible for benefit payments. Excluded are certain employees, such as agricultural workers, domestics, casual laborers, and employees of the federal and state governments. Qualified individuals receive payments ranging between $10 and $85 a month, depending on the total amount of wages received between December 31, 1936 and the individual's sixty-fifth year. All employees make premium payments in the form of an income tax on not more than $3,000 of their wages for any one year. The tax rises from one per cent in 1937 to three per cent in 1949 and remains at that level. Each employer deducts the amount of the tax from his employees' wages. He adds to it an equal amount as an excise tax and pays both into the United States Treasury. Appropriations sufficient for payments in any given year are made to a special old age reserve account in the Treasury. The Secretary of the Treasury makes old age benefit payments after certification of the names of eligibles by the Social Security Board.

Unemployment Insurance Under the Act.—The unemployment

provisions of the Social Security Act leave it to the states to formulate their own specific programs. The federal government grants the states a subsidy only in an amount sufficient to cover the expense of administering their laws; but there is a federal tax designed to induce the states to adopt unemployment insurance plans. This is a tax of three per cent of their payrolls on all employers who have employed eight or more workers during each of at least twenty weeks in a given year; but where employers have contributed to qualified state unemployment funds, such contribution is deductible from the tax up to 90 per cent of the latter. To secure the approval of the Social Security Board the state acts must contain certain specified provisions. All payments must be made thru public employment offices. All money received in the state unemployment compensation fund must be paid into an Unemployment Trust Fund in the United States Treasury. Withdrawals may be used only for compensation payments. Compensation may not be denied to eligibles who refuse available employment because of a labor dispute, or who refuse employment requiring membership in a company union or forbidding membership in a *bona fide* labor organization. Since all state laws must satisfy the same set of prerequisites for approval, some uniformity among them will necessarily result, but a wide measure of state autonomy is granted by the act. Decisions concerning eligibility, waiting time, maximum and minimum benefits, the wage groups to be covered, and the actual running of the system, as well as contributions by workers, are left to the states.

Some Problems Presented by the Social Security Act.—As the first major federal legislation in this field, it is not surprising that the Social Security Act has raised certain controversial issues. Drawn with the view of safeguarding its fate before the Supreme Court, should its constitutionality be tested, the act evidences considerable respect for states' rights. There are many who believe that the procedures thus adopted were at the expense of economy and efficiency. Those who favor a truly centralized national system point out that such a plan would be more in accord with the insurance principle of spreading risk—both geographically and industrially. And, further, centralization would mean administrative economy and uniformity. In connection with unemployment compensation, it is pointed out that American industry is largely interstate in character, and that the causes of unemployment are national, rather than local. The various state laws bear out the contention that the unemployment provisions therein display a considerable lack of uniformity. In Idaho and the District of Columbia, for example, workers in commercial and industrial establishments employing one or more persons are eligible for benefits. In many other states coverage begins only when eight or more persons are employed. The maximum number of weeks for which benefits will be paid varies from twelve to twenty. There are further variations in waiting period, and maximum and minimum payments. In certain states contributions are required from both workers and

employers, in others from employers only. In the District of Columbia contributions are made by the government and employers.

The act is further subject to criticism because of insufficient coverage. Unemployment benefits are denied to farm laborers, maritime workers, institutional and governmental employees, domestic servants (except in a few states), and, generally, all employees in small establishments. Also, agricultural workers, domestic servants, sailors, and institutional and governmental employees, as well as casual laborers, are ineligible for old age pensions.

Since unemployment is a problem beyond the power of the individual worker to influence, and mainly beyond the power of the individual employer to eliminate, it is argued that governmental contributions to the expense of unemployment compensation should be provided for. Many believe that under almost all state plans now in force the full burden is borne by the employees, since it is felt that the payroll tax upon the employer can, and will, be shifted to them in lower wages. If the benefits of social security are regarded as a service to be bought and paid for by the individual recipients, this is right and proper. However, if social security taxes are to be based on ability to pay, there is a further argument for a national system, under which the federal government could exercize its power to levy on incomes and inheritance, to raise a considerable portion of the necessary funds.

A final problem of considerable economic significance centers around the reserves to be accumulated under the present plan. All amounts raised by contributions to the old age pension and unemployment compensation reserve accounts must be paid over to the federal government. Funds credited to these accounts are to be invested by the Secretary of the Treasury in interest-bearing obligations of the United States or obligations guaranteed by the United States both as to principal and interest. It is estimated that by 1980 the old age pension reserve will have reached the sum of forty-seven billion dollars. The unemployment reserve cannot be estimated accurately, since the amount of payments which will be required is incalculable, but it will probably reach several billion dollars. It appears, then, that by 1980 the insurance reserves in the hands of the Treasury will have exceeded the existing public debt of the United States and will amount to approximately one-sixth of the total wealth of our country. The magnitude of this fund is staggering, and its political possibilities are ominous. Will Congress not find it too easy to increase the public debt when so good a market for its bonds is available? Will it not be tempted to make new loans in order to provide the legal medium in which this fund must be invested? And what will be the effects upon our banking system of this enormous withdrawal of federal bonds from usual investment channels and the concentration of this gigantic fund in the hands of the Treasury? These difficulties could

all be avoided by abolishing the reserve fund entirely. The fund is quite unnecessary. Unlike a private insurance company, which has no source of revenue to fall back upon if current receipts of premiums are not sufficient to meet its losses, the federal government has a taxing power adequate at all times to meet its obligations for the payment of insurance benefits. Therefore, it does not need a reserve in any case. But this reserve is largely a delusion, for it consists of the government's own securities. Therefore, the revenues derived from the investment in these securities must in any case be obtained from federal taxes levied at the time when the insurance payments are to be made. Why then go thru the fiction of taxing the people to pay interest on bonds held as insurance reserves, which interest will be paid to wage-earners for unemployment or old age benefits, when the same end could be accomplished more simply and directly by taxing the people in the first place to pay those benefits? In view of all these considerations it is to be hoped that the reserve feature of the Social Security Act will be abandoned.[5]

In the passage of the Social Security Act, the United States was merely following, rather belatedly, long established practices of European countries. It should be realized, however, that social insurance is still in an experimental stage in this country and that peculiar difficulties are created by our constitutional limitations upon the power of the federal government. Modification of the existing legislation in certain respects, in the light of actual experience under its provisions, is both to be expected and desired.

Summary

Workers in industry are subject to a variety of risks which include industrial accidents and occupational disease, premature old age, loss of market for their skill thru technological changes, and, above all, unemployment. Unemployment is not due to a permanent lack of total demand for labor. It arises from business depressions, from technological changes, from seasonal changes, and from the frictions of the labor market. As a result there is always a reserve of unemployed labor. Keynes has offered the controversial theory that unemployment results from shrinkage in monetary demand caused by the hoarding of savings for which (with prevailing wages and interest rates) there is no profitable opportunity of investment.

The reduction of workers' risks requires the prevention of accidents by use of safety devices and a program of safety education, a decrease in occupational disease thru more sanitary working conditions, and a number of measures tending to reduce unemployment, including: (1) vocational training and reëducation, (2) a better organization of the labor market, thru a national system of employment exchanges, (3) spreading the burden

[5] In Chapter XIV it will be shown, however, that unemployment reserve funds *can* be so handled as to help smooth out business fluctuations. This does not apply to old age insurance reserves.

of employment over a larger number of persons by reducing hours of work, without increase in wages per hour (but this will not increase the total demand for labor), (4) the concentration of public works in periods of depression, (5) the stabilization of individual businesses by efficient management.

Further measures are needed to convert the social costs of maintaining disabled and unemployed labor into business costs. Social insurance will help to accomplish this. National social insurance systems, paying benefits to workers in cases of accidents, sickness, old age dependency, and unemployment, are widespread in European countries. In this country, most states have developed systems of workmen's compensation for accidents, placing the entire burden on the employer. The Social Security Act now provides for old age pensions and annuities, and unemployment compensation for certain categories of workers, under the supervision of a Social Security Board. The old age pensions are paid by the state and federal governments. The cost of the annuities and unemployment benefits are shared by workers and employers thru payroll and wage taxes levied for the purpose. The insurance system provided by this act lacks uniformity and is insufficient in its coverage, while the enormous reserve provided offers political and financial difficulties which are a serious weakness.

SUGGESTIONS FOR FURTHER READING

An excellent presentation of the problems of social insurance and how they have been met in various countries is contained in Barbara Armstrong's *Insuring the Essentials* (1932). In his *Standards of Unemployment Insurance* (1932) Paul H. Douglas presents a brief survey of that problem. For an excellent analysis of the Social Security Act and consideration of the problems raised by its passage, see either Paul H. Douglas, *Social Security in the United States* (1936), or Eveline M. Burns, *Toward Social Security* (1936).

Most students of unemployment, including the present writers, are deeply indebted to Sir W. H. Beveridge's able and comprehensive study, *Unemployment, a Problem of Industry* (3d ed., 1912). A good recent survey, tho somewhat more limited in scope, is Paul H. Douglas's and A. Director's *The Problem of Unemployment* (1931). H. Feldman's *The Regulation of Employment* (1925) is an excellent discussion, stressing the responsibility of employers for industrial irregularity, and pointing out how management policies can be made to reduce unemployment.

J. M. Keynes' peculiar theory of unemployment is set forth in his *General Theory of Employment, Interest and Money* (1936). It is obscurely written, and has given rise to much controversy.

CHAPTER X

PROBLEMS OF POPULATION

A. Population and the Means of Subsistence

Population and Productive Efficiency.—The chapters in Part II up to this point have dealt with means of improving the technique, the organization, and the personnel of industry, with a view to securing greater efficiency in production. They have shown that there is much waste and friction and lack of coördination in industry, the removal of which would greatly increase our output of economic goods. But mere increase of production is of little advantage unless it means a larger income for each member of society. What we should strive to attain is maximum output per capita, and not merely maximum aggregate production. This brings us face to face with the problems of population. These problems cannot be ignored in any program for improved production, for failure to attend to them may cause all the gains of increasing national income to be swallowed up by the increase in people. If our income is doubled at the same time that our population grows threefold, it is obvious that the average condition of the people is worse than it was before. Hence it is extremely necessary to the maintenance of economic welfare that improvement in the arts of production should be coupled with a program for the control of population growth. We must seek that balance between the number of people and the available productive resources which will yield the highest per capita income. If we permit the increase in numbers to go beyond this point, we are practically destroying with one hand what we are building up with the other. We must not forget that increasing wealth provides the means of support for a larger population and is, in a sense, a direct inducement to an increase in numbers. We will do well, therefore, at the close of our discussion of problems of efficiency in production, to look into this question, to ascertain to what extent, if at all, our national progress is threatened by the growth of population, and what measures we should take, if any, to forestall such a possibility.

The Law of Population.—The main outlines of the population problem were set forth by the British economist, Malthus, in his "Essay on Population," more than a hundred years ago. It was in 1809 that he laid down his now famous *law of population*. The law in its modern form may

be stated thus: *In a given state of the arts of production, population tends to outrun subsistence.* The reasons for this are two. Man has been endowed with the instinct to increase and multiply, and the natural exercize of this impulse makes possible a very rapid increase in the numbers of mankind. On the other hand, man must live on the food products and raw materials which he can wrest from the land at his disposal. And it is an established principle of economics that, in a given state of the arts, after a certain point has been reached, increasing applications of labor to land fail to bring equal increases in product. Hence the increased labor caused by the growth of population finds itself opposed by the principle of diminishing returns, and per capita production tends to decline. If the progress of the industrial arts is sufficiently rapid, it may overcome the tendency to diminishing returns, permitting the labor of man to yield more than enough to provide for the ever-increasing numbers. But there is always the danger, which has become a tragic reality many times in the course of the world's history, that the multiplication of human beings will take place faster than scientific discovery and inventions can make provision for it. When this occurs, there is likely to be trouble. As Malthus put it, population must then be checked by either positive or preventive means. Positive checks will take the form of increasing deaths, due to infant mortality, epidemics, wars, or other disasters, brought on by low standards of living resulting from the ruthless struggle which overcrowding causes. If population is not reduced in this way, its growth must be retarded by preventive checks, which decrease the number of births—by late marriages, by immoral sexual practices, by abortions, or by deliberate control of births, all of which depend largely upon the customs relating to the family which prevail among the people concerned. Of course, if there is available elsewhere in the world undeveloped land which might be drawn upon to provide means of subsistence for a growing people, the nation which is in a position to utilize it thru colonization, emigration, or the importation of foodstuffs therefrom, may escape the effects of these checks for a time. But this solution of the problem is not always possible, and it is becoming less so for all nations as the unexploited portions of the world are being gradually peopled and developed.

Malthus was particularly pessimistic at the prospects presented by his law, and his gloomy views were not unreasonable, in view of the miserable condition of the masses in England and other parts of the world at the time he wrote. Europe was then too densely populated. But it will be recalled that, in the early years of the nineteenth century, the remarkable advance in the technique of industry, known as the Industrial Revolution, took place; and it was during this period also that America and other undeveloped sections of the world were rapidly being opened up and colonized. The great increase in foodstuffs and raw materials placed

at the disposal of European peoples by these developments offered an easy escape from the Malthusian difficulty, and income increased so much more rapidly than population that Malthus' prediction of overpopulation was not fulfilled. In the optimism of the nineteenth century, the population problem was no longer looked upon as serious; but today the situation is different, and sociologists and economists again are coming to view it with some concern. There are certain facts in the present situation which deserve our thoughtful consideration if we are to turn into a high level of individual prosperity the possibilities of increasing production presented to us by our knowledge of improved methods and organization.

The Growth of Population in the Past.—The increase in the numbers of mankind in the past century and a quarter is a remarkable evidence of the power of the human race to increase and multiply when it has the opportunity to do so. Prior to 1800 its growth had been comparatively slow. The world's population in that year has been estimated at less than 850 millions, which is not a large number when it is considered that the human race was then some half a million years old.[1] Since 1800, however, the population has more than doubled, until at the present time there are estimated to be almost two billion souls in the world, a growth of over a billion in a little more than a century. Almost nowhere has the rate of this increase been greater than it was in the United States. The figures for this country are as follows:

Year	*Millions*	*Percentage of Increase*
1800	5.3	
1810	7.2	36
1820	9.6	33
1830	12.9	34
1840	17.1	33
1850	23.2	36
1860	31.4	36
1870	38.5	23
1880	50.1	30
1890	62.6	25
1900	75.7	21
1910	91.9	21
1920	105.7	15
1930	122.8	16

From this table it appears that, from 1800 to 1860, our numbers were increasing at an average rate of almost 35 per cent per decade—a rate sufficient to double the population in about twenty-five years.

The increase in world population was made possible by a number of things. In the first place, this was an era of rapid development in the science of agriculture. New knowledge concerning the rotation of crops,

[1] These figures are taken from Edward M. East, *Mankind at the Cross Roads* (1923), pp. 66–67.

the nature of soils, fertilization, and the like, led to some increase in the amount of product obtainable from each acre under cultivation. Moreover, the technical inventions of the Industrial Revolution gave rise to a number of mechanical appliances which greatly increased the efficiency of labor in farming. Such devices as improved plows, reapers and binders, and other agricultural machinery, made it possible for one man to cultivate effectively a much larger acreage than he could before. But this in itself would not have been so significant were it not for the fact that the opening up of new territory in various parts of the world, and especially in the United States, placed at the disposal of mankind an enormous increase in the land available for productive purposes. The significance of this expansion can hardly be exaggerated. It benefited not only those nations which, like the United States, found the new territory at their very doorsteps, but it provided a means of subsistence for increasing populations in the countries of Europe whose geographic boundaries offered no possibility of expansion. The area of the British Isles could not be increased, but the British people could draw upon the vast producing areas of Canada, the United States, and Australia, by concentrating their energies on manufactured goods and exchanging them for the raw produce imported from those countries. Holland, Belgium, and other industrial nations were similarly permitted to support a very congested population by exchanging their specialties for foodstuffs from other parts of the world. There was also made possible emigration from densely populated regions to the new areas, and this took place on a large scale. These fortunate and unprecedented events offset the tendency of population to increase faster than the means of subsistence.

The Present Rate of Population Increase.—It is to be noted, from the table given for the United States above, that, in this country, the rate of growth of the population is not now so rapid as it formerly was; and the same thing is true for all of those nations which experienced the phenomenal increase in the growth of their numbers which has just been described. Nevertheless, the present rate of increase in the world's population is by no means slow. Prior to the World War the natural increase of births over deaths in such countries as Australia, Argentina, New Zealand, the United States, and some of the Canadian provinces may be described as high, ranging not far from 20 per cent per decade. In England, Germany, and the Scandinavian countries it has been moderately high, ranging somewhere around 10 per cent. In some countries, such as France, China, and Mexico, the rate is relatively low, ranging not over 5 per cent. But in no country, with the possible exception of Mexico, do we find no increase at all.[2] The average annual rate of growth for twenty-six

[2] The above figures are taken from W. R. Tylor, *The Increase of Contemporary Peoples,* in *The North American Review,* Vol. 218, pp. 607–620 (November, 1923).

of the leading countries, during the five years from 1906 to 1911, was 11.59 per thousand. This rate is sufficient to double the population every sixty years. The rapidity of such an increase is better appreciated when we consider what the world's population would be in the course of a few years if it continued to increase at this rate. Taking the population in 1924 to be 1,850,000,000 (which is a reasonably close estimate) the number of the world's people would reach 3,700,000,000 in the year 1984, 7,400,000,000 in 2044, and 14,800,000,000 in 2104.[3] This means that in less than two centuries, the population of the world would be multiplied more than seven-fold.

We are particularly interested in the growth of population in the United States. The figures for this country were given in a preceding paragraph. It appears from these statistics that the increase in the decade from 1920 to 1930 was approximately 16 per cent. Part of this was due to immigration, but this source of increasing numbers will no longer be of importance, because of our recent restrictive immigration laws. On the basis of present tendencies, it has been estimated that we can expect a population of from 132,500,000 to 134,000,000 by 1940, from 140,500,000 to 145,000,000 by 1950, and from 145,000,000 to 190,000,000 in 1980.[4]

The Question at Issue: How Long Can These Rates of Increase Continue?—It is unthinkable that such rates of increase in numbers as are now taking place thruout the world can continue indefinitely. A simple calculation will prove it to be impossible. A statistician has figured that, at an increase of 1 per cent per annum (which is slightly less than the average rate for twenty-six countries given above), the progeny of a single pair of human beings would in ten thousand years be so vastly numerous that it would require 1,340,000,000,000,000,000,000 earths merely to furnish material for their bodies! It has been variously estimated that from three to fourteen billions is the utmost number of persons that can find subsistence on this planet.[5] It is inevitable, therefore, that at some time in the future the increase in numbers must cease. Sooner or later, the checks to population growth described by Malthus must be felt. The only question that confronts us is, When? Is the pressure of population soon to become so serious that it will present a difficult problem, or is the prospect of this situation so remote that we need give it no present concern? On this matter two contrasting points of view prevail among students of the problem—one optimistic, the other pessimistic. These two attitudes, with the reasoning advanced by those who hold them, we may now consider.

[3] The statistics are those of G. H. Knibbs, in *The World-Problems of Population, Scientia,* Vol. 38, pp. 249–262 and 329–334 (October and November, 1925).

[4] W. S. Thompson and P. K. Whelpton, *The Population of the Nation,* in *Recent Social Trends in the United States,* (1933) Chap. I. See also Pearl's Curve of Population Growth for the United States on page 196.

[5] G. H. Knibbs, *op. cit.*

An Optimistic View of the Possible Increase in Food Supply. —The optimists bring forward a number of facts to support their position. They point out, for instance, that there are still vast unused agricultural resources in the world. The lands of North and South America, South Africa, Australia, New Zealand, and some parts of Asia are by no means so intensively cultivated as they might be. There are also swamps which can be drained, and arid regions which can be irrigated. There are tropical regions in South America and Africa, rich in fertility, which may eventually be made to yield large quantities of foodstuffs if modern sanitation makes it possible for progressive races to inhabit them permanently. Much of this land is cultivated at present, but not as intensively as it might be. When we consider the high yields per acre which are produced in some parts of the world where intensive agriculture is carried on, with the low yields obtained by extensive methods in such countries as the United States, Canada, Argentina, Brazil, Siberia, and central Africa, it is apparent that there are still unused productive resources in the latter which might be made to support a much larger population. It is possible to grow two crops in a season, where only one crop is now cultivated, and there are some geographers who believe that there is a great opportunity to provide additional food by making use of tree crops, notably nuts and fruits, not now resorted to. Trees can be raised on land that is not suited to other kinds of agriculture, and some of these tree products are very rich in nutritive value. It has also been suggested that the sea may eventually yield new foods in large quantities in the form of mollusks, fish, and even marine plants. Then there is science to be considered. New discoveries in the way of fertilizers and agricultural methods may serve greatly to increase the yield per acre and per man from farming. Chemistry is making great strides, and some chemists hold forth the prospect that eventually they will be able to produce synthetic foods from inorganic materials. This may be visionary; but it is certain, at least, that new methods of making nitrogen from air are proving practicable, and this can be used for fertilizer to increase our crops from the soil. What the eventual possibilities of science in such directions may be, no man can tell.[6]

It may also be argued that, in recent years, the United States has had so large a production of foodstuffs, as evidenced by the surplus of agricultural products which had to be sold at sacrifice prices, that obviously we could support many more people than we are doing. It is true that we could *support* more people, but the question is whether we could do so without lowering our standard of living. Our agricultural surplus was due in large part to the cultivation of sub-marginal lands

[6] For a presentation of the optimistic view regarding the possible food supply see J. Russell Smith, *The World's Food Resources* (1919), Chaps. XXV–XXVII.

which yield a small return to the cultivator. A growing population confronted by such conditions is working against the law of diminishing returns, and is likely to feel the pressure thereof. This is no doubt one reason why our farmers have fared so badly.[7]

Limits to the Food Supply.—Hence, a majority of students of the population problem are not very sanguine regarding our prospects. They recognize that, while the land in many parts of the world is not cultivated as intensively as it can be, we must reckon with the principle of diminishing returns; and it is not to be denied that an increase in the yield per acre in countries where extensive methods are largely in use is only obtained by the application of a proportionately greater amount of labor and capital.

This means that, altho increased aggregate yields of foodstuffs can be obtained from such sources, they will be smaller per capita unless unforeseen inventions occur. Hence, larger numbers can be supported by more intensive agriculture only at lower standards of living. This is not a very pleasing prospect. High yield per man is much more to be desired than high yield per acre, if the latter is to be obtained only with a proportionate increase in labor. There is the possibility that science will find ways of offsetting diminishing returns, so that we can obtain increasing yields per acre without decreasing the yield per man, but the achievements of science in the past give no assurance of this, for they have been mainly (tho not wholly) of a different sort. New methods of transportation have made accessible for cultivation lands which were formerly unusable because of their distance from population centers, and mechanical inventions, such as the reaper, the threshing machine, and the tractor, have made it possible to cultivate this ever-increasing acreage with proportionately less labor than before. So, while the yield per acre has been increased to some extent by a somewhat more intensive agriculture, the presence of abundant new lands on our frontiers has enabled us to escape the declining per capita production which would have been occasioned by a more pronounced tendency in this direction. Now this process of extending agriculture over more territory is reaching its limits. The unused parts of the world referred to in the preceding paragraph are not, for the most part, as fertile as those already put to the plow. In the United States, for instance, only the poorest regions remain uncultivated. Professor East[8] has calculated that only about 40 per cent of the land area of the globe is arable, and that at the level of efficiency prevailing in the agriculture of western Europe during periods of peace (which is somewhat better than the average for the world at large), 2.5 acres of land are necessary to support one per-

[7] See the further discussion of our agricultural problems in Chapter XIX.

[8] Edward M. East, *op. cit.*, pp. 69 ff. Chaps. IV and VI of this work contain an excellent presentation of the pessimistic view regarding our food resources.

son at a standard of living equal to that which is found in the more densely populated countries of Europe. It is to be observed that this is a standard of living considerably lower than that which prevails in the United States today. From these figures he computes that the entire world is capable of supporting a maximum population of 5,200,000,000. At the present rate of increase this figure would be reached in a little more than a century. We shall have occasion to see what this means for the United States in a later paragraph. Moreover, there is some reason to believe that we have already pushed the intensiveness of cultivation of our best lands and the utilization of our poorer lands so far that the per capita return in agriculture is now declining. East adduces evidence to show that the amount of labor and capital employed per acre in the agriculture of the United States is increasing faster than the product obtained. He believes that a decline has set in which began about the year 1900. This view is shared by other writers.

These serious prospects are based on the assumption that no miraculous revolution in agricultural methods and no wondrous discovery in the production of synthetic foods is to be looked for. He would be a bold man who would attempt to set limits to the possibilities of science, but it would be reckless to ignore the threat of danger merely in the hope that such a revolution will come. A mature survey of our prospects for the near future does give grounds for some concern, for there is not at present in sight the likelihood of such progress in the arts of agriculture as will offset the tendency to diminishing returns which would be caused by a continuance of the present rate of increase in the world's population. It would be wise, therefore, to proceed with caution in formulating a population policy. We had better keep the increase of numbers in check until the means of subsistence at high standards of living for more people is already at hand.

The Supply of Other Resources and Their Conservation.—This cautious attitude is supported by the prospects for materials other than foodstuffs required by the world's people. Such agricultural materials, for instance, as cotton and wool, so necessary to our present habits of living, present a problem not unlike that of food. The cotton crop in recent years has been seriously threatened by the ravages of the boll-weevil. This difficulty, however, undoubtedly will be overcome in time. What is of more concern is the fact that, in view of the limited territory at the disposal of the nations of the world, no one crop can be increased materially without encroaching upon other crops. Such products as cotton and wool are in the position of competing for land with necessary foodstuffs. Increasing need for them, therefore, seems likely to accentuate the pressure of population on the supply of food.

The rapid depletion of our forests is another factor to be reckoned

with. No longer can we rely upon a vast domain of virgin timber for our lumber supply. Already we are importing lumber and the present rate of cutting in this country exceeds the annual new growth. The scarcity of timber is likely to be felt even more acutely as population grows.

More serious is the situation with regard to mineral products, especially coal and oil. Its significance for the population problem is plain. Our civilization is based upon fuel for power, and metals, especially iron, for the construction of buildings, machinery, and industrial equipment of all kinds. Unlike agricultural products, these raw materials cannot be reproduced once they have been used, and the supply of them is definitely limited by the deposits which nature has placed in the earth. We are in no imminent danger of exhausting the deposits of minerals for several hundred years at least—that is, our coal, iron and oil will not be entirely used up within that time; but we are faced with the fact that the best sources of supply of these minerals are rapidly being exhausted, so that we are forced to make greater exertions to obtain them. We are extracting mineral products from the soil at a rate much faster than the growth of population. This means that we are gradually passing from the richest deposits of coal, iron, oil, and other minerals to those which are poorer or less accessible. We are confronted by the immediate prospect of decreasing yields per unit of labor and capital in most of our mineral production. So far as fuel is concerned, some engineers hold out the prospect of substitutes for coal and oil thru the utilization of water power, the harnessing of the tides, the development of engines operated by the difference in the temperatures of sea water at its surface as compared with the lower depths, and the direct harnessing of the sun's rays. If these alluring prospects are ever realized, we need have no fears as to sources of power for future increases in population, but in the meantime caution bids us go slowly. The mineral situation, therefore, presents an additional reason for the restriction of population growth.

B. The Restriction of Population Growth

The Need for Restriction.—The preceding survey has indicated the existence of a serious population problem for the world at large and for the United States in particular. It has been shown that the numbers of mankind are rapidly increasing, the rate of growth in the United States being sufficient to double our population every seventy-five years. The survey of food and other resources shows that this rate of increase might possibly be maintained for a considerable period and the people provided for, but only at a diminishing rate of return. Such diminishing return would mean that the people would have to adopt lower standards of living than those which they at present enjoy. It is by extremely low

standards of living that the dense populations of such overcrowded countries as China, India, and Japan are supported. The people of the United States enjoy a high standard of living, as high as that which prevails anywhere else in the world, and it is this which is the best evidence of our prosperity. A reduction of that standard of living would be a calamity; yet this is a possibility that confronts us, just as it confronts the nations of Europe and elsewhere, if we ignore the population problem. It would be to the best interests of our country, therefore, if population growth could be restricted so that at no time would it be allowed to increase faster than the increase in foodstuffs and raw materials essential for the maintenance of present standards.

The Declining Birth Rate.—Some ground for optimism is afforded by the fact that within recent years the rate of population increase among the more progressive peoples has been declining. A reference to the figures for this country on page 187 indicates that our present rate of increase, including immigration, is less than half what it was sixty years ago, and has been declining steadily ever since 1880. This is fairly typical of conditions in other parts of the world, except that in the older countries the decline set in earlier than here. This decrease in the rate of growth is not the result of a higher death rate, for modern methods of sanitation and the treatment of disease have greatly reduced the number of deaths and have lengthened the average life of human beings. This factor, therefore, would tend to cause an increase, rather than a decrease, in the growth of population. What has happened is that the birth rate has been decreasing thruout the countries of America and western Europe.

That this tendency is likely to go further is indicated by the researches of a recent student of population trends.[9] He has shown that the growth of population cannot be predicted by a simple comparison of birth and death rates. Population can maintain itself only if the women of child-bearing age give birth to enough girls to replace them. If the number of potential future mothers is not sufficient to replace those passing out of the child-bearing period, population must decline, unless each woman gives birth to more children than before. By studying these factors in the populations of Western and Northern Europe, he comes to the conclusion that population trends in those countries have already passed the critical point. "According to the fertility and mortality in Western and Northern Europe in 1926, 100 mothers give birth to 93 future mothers only. With the fertility of 1926 the population is bound to die out unless the mortality of potential mothers decreases beyond reasonable expectations. And fertility continued its downward path in 1927."[10] "With fertility and mortality as they prevail at present, the population of some smaller countries still shows a genuine growth,

[9] R. R. Kuczynski, *The Balance of Births and Deaths* (1928).
[10] *Ibid.*, p. 54.

but the population of the larger countries—France, and especially England and Germany—is doomed to die out."[11] Kuczynski may have exaggerated the situation, but the general trend toward a decline in the number of births, both in Europe and America, is undeniable. Let us see what this means.

The decline does not appear to be due to any reduction in the fertility of human beings, altho this has been suggested by some ill-informed writers as a possible explanation. There is no evidence to show that the capacity of men and women to procreate and bear children has been appreciably reduced by the trend of biologic evolution. Nor is there any statistical evidence that marriages are being postponed to such a late age in life that children are less likely to result. What is happening is that the birth of children in modern families is no longer being left to the blind forces of nature, but is being deliberately controlled. With the spread of knowledge as to the means by which the size of one's family may be limited, married couples are taking care not to bring into the world more children than they can support conveniently. Large families are not compatible with the maintenance of high standards of living, for the expense of bringing into the world, rearing, and educating a large number of children is more than the average purse can stand. Therefore, parents prefer fewer children brought up with the extra care and at the higher level of comfort which the small family makes possible.

It seems probable that this tendency to smaller families is a direct result of the pressure of population upon the means of subsistence. If it were possible to raise large families without jeopardy to the comforts which western peoples have come to expect, it is reasonable to assume that there would be less restriction of births. The limitation of offspring, therefore, is apparently a confirmation of the Malthusian doctrine. It is one of the preventive checks to population in actual operation—but a check of a very different sort from that which was anticipated by the author of the famous essay.

It may be thought that this decline in the birth rate is an answer to the specter of overpopulation with which the pessimists say we are confronted; and so it is, if it is intelligently promoted and utilized; but we must not expect it to operate of its own accord with sufficient force to bring about all the restriction of population that is desirable. It does indicate that we need not expect the present rate of growth to be maintained, but that does not mean that the problem of population is a bogey to be forgotten. It is still worthy of careful consideration, as we shall see.

The Logistic Curve of Population Growth.—An American biologist, Raymond Pearl, has made some interesting laboratory experiments and statistical studies of the growth of populations, which lead him to believe that the growth of numbers among all living organisms, including man,

[11] *Ibid.*, p. 4.

is subject to the same law. His experiments on yeast and fruit flies indicate that if these vegetable and animal organisms are placed in an environment where the food supply is limited, at first they multiply rapidly, until pressure upon the means of subsistence begins to be felt, and then the rate of growth falls off. If this rate of increase is plotted on a graph, it gives a curve which always has the same general shape. Similar curves can be drawn for human populations. Such a curve for the United States is given in Figure 1.[12] It is to be observed that the curve rises slowly at

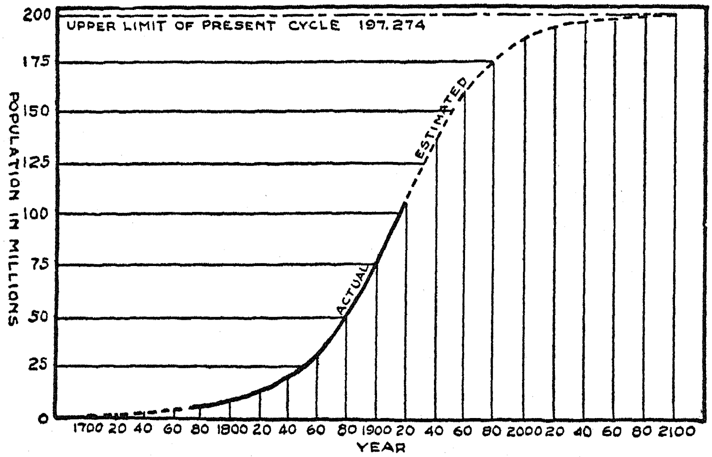

FIGURE 1. Pearl's Curve of Population Growth for the United States.

first, then increases during the early stages, when food is abundant in relation to numbers, until it reaches a maximum, after which the pressure of population begins to be felt and the rate of increase declines to its upper limit. Professor Pearl's researches indicate that such a curve can be drawn up for any statistics of population growth which can be found either among vegetable organisms, animal organisms, or human peoples. Of course the exact rates of growth will not be identical in all these cases, but the general shape of the curve will be the same. It is possible that, after a population has reached the upper limit of its growth under the conditions of environment hitherto prevailing, a change rendering the environment more favorable may take place, releasing the pressure and allowing the numbers to increase as before. The curve will then shoot upward again until it reaches a second limit similar to the first. Something like this undoubtedly happened to the human race in that era of unprecedented development which accompanied the colonization of the New World and the occurrence of the Industrial Revolution. The sociologist Giddings[13] some years ago suggested that there is a rhythm in

[12] Raymond Pearl, *The Biology of Population Growth* (1925), p. 14.
[13] F. H. Giddings, *Principles of Sociology* (1896), p. 335.

the race between population and progress. "A general advance in material well-being and a gradual elevation of the standard of living, then a growth of population until it becomes increasingly difficult to raise the plane of living, then another era of economic progress—this rhythm seems to be the form of the demogenic process." If this law be true, it is possible that we are reaching the close of an era of progress, and that the immediate prospect is for population pressure, before another advance in the arts and science paves the way for a new upward movement. This may be the reason for our declining birth rate and for the unfavorable outlook for food resources now claiming the attention of students of population.

The Possible Growth of Population in the United States.—Prediction in the field of social science is always hazardous. There are so many unknown factors to be reckoned with. The possibility of some revolutionary discovery in science is so unpredictable that we cannot foresee the future development of social phenomena with any certainty. If we may assume, however, that the present conditions of the economic environment are likely to progress with reasonable regularity, rather than by some unexpected gigantic leap, then it is not safe to base our future plans on any less conservative an assumption than Pearl's theory. A logistic curve affords the basis for estimating what the probable future increase in the population of the United States will be. Taking the census figures from 1790 to 1920, it is possible to plot such a curve and to extend it into the future. Pearl has done this with the results shown in Figure 1. On the basis of this computation, it would appear that we have just passed the point of maximum increase in our numbers, and that we may look forward to a decline in the rate of growth which will reach its upper limit about the year 2100. At this time, Pearl estimates, we may expect to have a population of 197,274,000, or, in round numbers, 200,000,000. The population of the United States in 1920 was approximately 106,000,000. Pearl anticipates, therefore, that we will have an increase of 91,000,000 within the next 175 years, practically doubling our population.

What are the prospects for supporting such a population? We have stated that the land is not fully utilized. Were we to cultivate it as intensively as is the practice in European agriculture, its yield could be greatly increased. Furthermore, if our people could be induced to adopt a simple diet with very little use of meat, such as that to which the German people are accustomed, we could provide food for 300,000,000 to 350,000,000 persons,[14] but this is assuming a reduction of the standard of living of the American people to the low levels of the workingmen of Europe. It verifies our previous assertion that increasing food can only be provided by a decline in the per capita yield, because of the operation of the law of diminishing returns. If we are to maintain our present high

[14] Estimates of U. S. Dept. of Agriculture, in its *Yearbook* for 1923.

standards of living, according to a recent estimate,[15] we cannot expect to support a population of more than 135,000,000. In the face of this finding, the prospect of adding nearly 100,000,000 to the inhabitants of this country within the next two centuries is rather disquieting. There is a population problem confronting the United States. What we have to fear is not death to our increasing numbers, but a more bitter competition and struggle for existence, with a depression of our plane of living.

The Optimum Population.—In any given state of the arts, there is a certain number of people whose labor will produce the largest possible per capita product from a given territory. A population of this most effective size is called the *optimum* population. If there are too few people spread thinly over a given area, they cannot develop their industries effectively. Up to a certain point, the growth of population promotes increased efficiency of production by making possible a greater degree of division of labor, the economies of large-scale methods in manufactures, and the more thoro cultivation of the soil. It also facilitates improved means of transportation, which make accessible productive resources that otherwise would have to go unutilized, and the rise of cities and towns brings into being those social pleasures and comfortable facilities which go to make up modern civilization. A large part of modern industry would be impossible to carry on as it is now done without a considerable density of population. To some extent these advantages may outweigh the disadvantage of the increasing cost of food. It may be worth while to give up a larger portion of our income for foodstuffs for the sake of obtaining motion pictures, travel, radios, libraries, better clothing, more luxurious homes, and so on. These things would not be possible without a considerable density of population. When increasing density has passed a certain point, however, pressure upon the means of subsistence becomes so great that it cannot be compensated by these luxuries. Then the evils of overpopulation, leading, as they must, to lower standards of living, begin to be felt. This optimum point marks the danger line in the growth of population. It should be the goal of national policy to maintain its numbers at the point of maximum per capita production, and not to permit it to go beyond this. What the optimum number is will depend upon the natural resources at the disposal of the people, the productive technique which prevails among them, and the effectiveness of their economic organization. It is a matter of finding and maintaining just the right ratio between population and resources in the prevailing state of the industrial arts.

The data are not yet available to indicate just what is the optimum population for the United States at the present time. The facts previously

[15] Alonzo E. Taylor, *Agriculture Capacity and Population Increase,* in L. I. Dublin, *op. cit.,* p. 96.

brought forth, however, tending to show that we have now reached a point where the per capita returns in agriculture are declining, seem to indicate that we have passed the optimum. In view of this, the prospects of further increase in our numbers, as estimated by Pearl and others, give grounds for serious concern about our future prosperity.

The Limitation of Births.—The reasoning of the foregoing paragraphs leads to the conclusion that the time has come when the peoples of the world should seek consciously to check the present rapid rate of increase in their numbers, if economic welfare is to be maintained. We have seen that many families, particularly among the more well-to-do, are already limiting the size of their families. Among the masses of the people, however, the rate of increase is still threateningly large. It appears that few parents really desire a large family of children, and that were it not for ignorance, they would restrict their numbers. Conventional taboos and prejudices in matters of sex, however, present a most difficult obstacle to the education of the people in such matters. The so-called birth control movement is an organized propaganda designed to break down this prejudice, and to bring about the repeal of the laws now in effect in the United States preventing the dissemination of information concerning methods of limiting births. There is much to be said in favor of the establishment of clinics where parents can be given such information. Such clinics have been publicly supported in some countries, notably Holland, and within the last few years a few of them have been opened in cities of the United States by private organizations, but their activities have been very restricted by hampering laws. An intelligent people can hardly continue complacently permitting the growth of population to go on without control of any kind. A few children in each family, reared at the high standards of living which small numbers permit, cannot fail to produce a nation of better men and women than can be expected from a numerous progeny brought up in poverty and squalor. The limitation of births is essential to the maintenance of that optimum population which leads to maximum per capita prosperity.

The Restriction of Immigration.—Thruout history the migration of peoples has been a means of relief from the pressure of population upon its means of subsistence. So long as there were unsettled areas into which surplus populations could flow, this was a good solution to the problem. With the world's virgin territories rapidly filling up, however, it no longer offers a satisfactory outlet for population growth; and, so long as it is relied upon, it can only lead to conflict among the nations struggling to find such outlets. Eventually it brings about overpopulation in the very regions to which the emigrants go. At best it affords but temporary relief; at its worst it is the cause of warfare and disaster.

This aspect of the population problem is of particular significance to

the United States because we have long been the melting pot, into which was poured the overflow from the densely populated countries of Europe and Asia. So long as our numbers were few in relation to our resources, the annual influx of these immigrants was perhaps an advantage, in that it helped us to attain to the optimum number; but now that we have passed this desirable point it is no longer to our advantage. Nor is it, in the long run, of advantage to the nations from which the emigrants are sent, for their departure merely permits a more rapid growth of numbers in the home country, and the gaps created are filled up as fast as they appear. There is little reason to believe that emigration in recent times has served seriously to check the increase of population in the countries of Europe and Asia. Hence a policy of restricted immigration on the part of the United States is altogether justifiable. Fortunately, the United States has definitely set about curtailing the numbers of its immigrants. By the Immigration Act of 1924, which followed a number of previous restrictive laws, the number of immigrants annually admitted to this country is limited to 3 per cent of the numbers of that nationality who were living here, according to the census of 1890. This law has been so administered that only about 150,000 persons or less are now admissible annually to our shores, and in 1932, for the first time, we had more emigrants than immigrants. When it is considered that, prior to the World War, immigrants were coming to our shores at the rate of more than a million a year, it will be seen that this is a very drastic reduction. The census of 1890 was chosen as the basis for this allotment, rather than more recent censuses, because it would keep out a larger number of the immigrants from southeastern Europe and Asia, who were considered by Congress to be less desirable than immigrants from the countries of northwestern Europe. Altho the method of restriction embodied in this legislation can be criticized, the fact of restriction itself marks an important step in the right direction and is altogether to be desired. Future legislation should be shaped, not with the view to admitting more immigrants, but to selecting them on a more rational basis of health and intelligence.

C. The Quality of the Population

Economic Aspects of the Qualitative Population Problem.—So far, we have been dealing with a quantitative problem; we have been concerned with the number of people relative to our resources. But there is also a qualitative population problem, equally significant for the national well-being. The welfare of a nation depends not alone upon maintaining the optimum number of people, but also upon their character. This is a biological and sociological problem into which it would not be appropriate to enter fully here, but it has its important economic aspects which we

cannot ignore. The prosperity of a nation must ever depend upon the efficiency of its producers. If its people are of vigorous physique, of persevering spirit, and of keen intelligence, its industries will prosper and its wealth will be great, provided its numbers are restricted. But if the people are physically or mentally weak, its economic prosperity will be correspondingly low.

If we would achieve prosperity, we must build upon a sound biological stock. We cannot expect to carry out the program of productive advance outlined in the preceding chapters of this work, unless we have the right kind of people to do it. This does not mean that the physical environment and culture of a people are not profoundly important. The knowledge upon which civilization is built, and a large part of the equipment of each individual for his tasks in life, are matters of tradition and culture passed on from generation to generation by social contacts and education, not thru biological processes. But the capacity to receive and carry on this culture is inborn; and according as that capacity is great or small, the progress of civilization will be advanced or retarded. If the race should deteriorate sufficiently in quality, our civilization might entirely pass away, as other civilizations have done before it.

The Differential Birth Rate.—In the vegetable and animal worlds nature sees to it that the biological stock is kept strong and effective, in relation to its environment, by a bitter struggle for existence, in which only the fittest survive. The comforts of civilization, however, have relieved man to some extent from the operation of this process of natural selection. While some of it still goes on (as when the ravages of certain diseases eventually build up an immunized stock) there is evidence that many of the features of our civilization are actually tending to preserve the weak and inefficient. Wars, for instance, kill off our most vigorous men. Medicine preserves many weak individuals who would perish in a more rigorous existence, and the ideals of celibacy cultivated by certain religious orders tend to prevent reproduction of some of the most intelligent members of society.

One of the most alarming aspects of this problem is to be found in the so-called differential birth rate. Attention has been called to the fact that the birth rate in this country and elsewhere has been declining. Unfortunately, this decline is most evident among the more educated and well-to-do families of society. Studies of the graduates of a number of the leading American colleges, for instance, indicate that they do not have enough children to reproduce themselves. The deaths exceed the births. Similarly, the native white population of this country, particularly in New England, is reproducing itself very slowly. At the other end of the economic and social ladder, the birth rate is high. Here large families are the rule. Worst of all, among the feeble-minded reproduction goes on

at an alarming rate. The morals of these people are very loose, and almost every feeble-minded woman gives birth to a large progeny of feeble-minded children, both in and out of wedlock. One hesitates to say that native born whites and college graduates represent the better biological stocks and that the poorer families are inferior, but there is some reason for assuming that, in general, those who have attained economic and cultural success are endowed with superior capacity, especially in view of the evidence regarding hereditary genius. If such is the case, then society is breeding from the bottom, and this fact is cause for considerable apprehension for the future. While we want our birth rate to decline, we do not want the decline to be confined to the most desirable stocks. Here, then, is a qualitative problem.

Racial Factors in Population Growth.—The world is peopled with a number of different races having different hereditary characteristics. There is more or less rivalry between the races for economic and political supremacy. In the United States we have a number of races, especially whites and Negroes, living side by side in a common civilization. Some people see in this a serious biological problem. They fear that the rapid increase of Negro, Mongolian, and other colored stocks will eventually threaten the supremacy of the whites and cause a deterioration in the quality of our people. It is believed by many that the colored races are innately inferior in mental capacity to the white race. Anthropologists, however, do not share these fears. Science has not yet developed any standards of racial superiority or inferiority that can be relied upon. Intelligence tests usually show that Negroes do not make as good a showing psychologically as white men, but it is by no means certain that these tests are any true measure of innate capacity. Differences in the traditions and culture of the two races affect the results in such a way as to obscure biological factors. The question of racial differences and their effects upon the quality of the people, therefore, must be set down as an unsettled problem. What is probable, however, is that if we were to draw two curves indicating the intelligence of two different races, such as the whites and Negroes, they would overlap, some members of both races rating very high and some members of both races rating very low. There would be some differences in the proportions, to be sure, but not of so marked a sort that we can designate any one race *in its entirety* as inferior to any other race. If this be the case, what we have to fear from racial factors in population growth is not so much the development of one race at a faster rate than another, but the increase of the weak individuals in both races. It is an individual problem.

Eugenics.—This very brief outline of the qualitative population problem shows that society faces a danger from failure intelligently to control its heredity. If we are in fact reproducing more rapidly among inferior than superior stocks, then the future prospects of society are gloomy in-

deed. We can, however, control our own destiny in this respect. It is not impossible to direct the processes of reproduction so as to bring out the best hereditary qualities that we have. Such scientific control of human breeding is known as *eugenics.* It is not supposed that we can mate men and women in the cold-blooded manner of the stock breeder, but it is possible to influence the marriage customs, directly or indirectly, in such a way as to prevent the reproduction of our most defective stocks and to encourage it among those of better quality. There are, accordingly, two lines of eugenic endeavor. One, known as *negative eugenics,* would prevent the increase in numbers among those classes of the population which are clearly defective. The promiscuous mating of feeble-minded and neurotic persons which now goes on is dangerous. It can be prevented in two ways. Mental defectives should either be incarcerated in institutions where the sexes can be permanently separated or, if allowed to remain at large, they should be prevented from reproducing their kind by sterilization. Such a program, if rigorously carried out, would practically rid us of these classes in a few generations. The obstacles to its fulfillment are three. In the first place, people hesitate to put into the hands of any human beings the power that the administration of such laws would entail, especially in view of the fact that scientists are not yet always certain as to just what constitutes a hereditary defect. Secondly, the expense of maintaining in institutions the thousands of feeble-minded and other defectives is very great. Finally, there is that repugnance and prejudice against any interference with sexual relationships that is deeply ingrained in the popular mind. Notwithstanding these difficulties, laws providing for the sterilization of certain criminals and defectives have been passed in many of our states, and altho they have not always been seriously enforced, some thousands of persons have already been sterilized.

Positive eugenics aims to promote the reproduction of our best stocks. A program of positive eugenics is much more difficult to carry out than one of negative eugenics; for it has been truly said that "love is blind," and it is very difficult to dictate to youth in the selection of a mate. Nevertheless, society has set up certain conventions and standards which do influence marriage. People do not often wed outside of their social class. Catholics are seldom mated with Protestants, nor Jews with Gentiles. Similar taboos are fairly effective as between markedly different races. If such conventions can be established and maintained on social, religious or racial lines, it is not unthinkable that we may build up similar conventions on biological lines. Education regarding the importance of hereditary soundness as a prerequisite for parenthood may in time succeed in introducing a considerable measure of eugenic choice into matrimony. Indeed it seems already to be having this effect. At any rate, it is a result greatly to be desired. The advancement of human progress by the

control of heredity has untold possibilities for the future prosperity and happiness of mankind.

Summary

The correct adjustment of population to resources is important for securing the benefits of productive efficiency. According to the Malthusian law, in a given state of the arts, population tends to outrun subsistence. If the arts do not progress fast enough, sooner or later preventive or positive checks to population must ensue. The very rapid increase of population in the nineteenth century took place, notwithstanding this law, due to the discovery of new methods of agriculture which increased the yield per acre, the invention of appliances which enabled man to cultivate a larger acreage than before, and the discovery and colonization of enormous new territories. The world's population is still growing at a rate sufficient to double itself in sixty years, and that of the United States in seventy-five years. Optimists see in more intensive cultivation, the development of unexploited territories, new methods and new crops in agriculture, and in the making of synthetic foods and fertilizers, the possibility of providing subsistence to maintain this rate of growth. Intensive cultivation means less product per man, however, and the new areas to be exploited are limited. There is evidence that per capita productivity in agriculture is now declining. Caution indicates that it would be safer to check the increase of population than to rely upon the discoveries of science. This conclusion is strengthened by the prospect of diminishing returns in the development of our minerals, raw materials, lumber, and fuels.

Some restriction of population is already manifest in the world's declining birth rate. Pearl's logistic curve indicates that the rate of population growth always slows up when pressure upon environment is felt. On the basis of his curves, he predicts a population of 197,000,000 in the United States in the year 2100. The indications are that we can support such a population only at a lower standard of living than now prevails. We should, therefore, seek to maintain the optimum population, which is that number that, in a given state of the arts, yields maximum per capita production. We have probably already exceeded this. Population growth should be checked by education of the people concerning methods of birth control, and by continuing our policy of immigration restriction.

Economic efficiency depends on quality as well as quantity of population. The rate of reproduction among the lower classes exceeds that among the upper classes, suggesting that we are breeding our poorest hereditary qualities. Some people fear there is similar danger in the growth of colored races, but there is little scientific basis for apprehension here. We should

seek rather to control the mating of individuals, regardless of race, thru eugenics. Negative eugenics would prevent the reproduction of defective stocks, and positive eugenics would encourage the reproduction of superior stocks. Such a program will build for progress by developing an improved race.

SUGGESTIONS FOR FURTHER READING

Edward M. East's *Mankind at the Cross Roads* (1923) stands out as the most careful and comprehensive survey of the population problem written in recent years. Two excellent brief surveys are Harold Wright, *Population* (1923), and A. M. Carr-Saunders, *Population* (London, 1925). Chapter I of *Recent Social Trends* (1933) is also a noteworthy essay on the subject.

For a full discussion of the biological factors in population growth and of the idea of the optimum see A. M. Carr-Saunders's larger work, *The Population Problem* (Oxford, 1922). A good summary of the biological aspects is also to be found in Samuel J. Holmes, *The Trend of the Race* (1921).

Good books dealing with the various aspects of modern population problems are Louis I. Dublin, *Population Problems in the United States and Canada* (1926), Edward B. Reuter, *Population Problems* (1923) and R. R. Kuczynski, *The Balance of Births and Deaths* (1928).

Raymond Pearl's *The Biology of Population Growth* (1925) sums up his statistical studies of population growth among animal organisms and human societies. His conclusions have been severely criticized.

Two recent books which express a growing concern over the possibility of a declining population are R. R. Kuczynski, *Population Movements* (1936), and Carr-Saunder's *World Population* (1936).

PART III

THE PROMOTION OF EFFICIENCY IN EXCHANGE

CHAPTER XI

EFFICIENCY IN MARKETING

A. The Nature and Process of Marketing

The Scope and Purpose of Part III.—In Part II we made an analysis of the productive process with the view to showing how the efficiency with which it functions might be increased. The process proved to be extremely wasteful and inefficient. Improvements were found to lie in the direction of improving industrial organization under proper governmental supervision, developing a better technique of management, reducing the friction between capital and labor, reducing unemployment, and controlling the growth of population. We are now ready to examine in a similar manner another phase of our economic organization—the exchange of goods, seeking both to understand, and if possible to solve, the problems interfering with the efficiency with which it functions. Our analysis of exchange problems will follow the outline customary in textbooks on economic principles,—the marketing of goods, the pricing of goods, money and banking systems, business cycles, and international trade. We shall conclude Part III with an analysis of the problems facing agriculture as an illustrative case. In this chapter we begin with a study of the marketing organization.

The Problem of Marketing.—When each individual and each small community attempts to supply all its needs thru its own efforts, there is little necessity for trade. It is only when individuals and communities specialize in their activities that trade on a large scale develops. Specialists must obtain the products they require thru exchange. The necessity for, and the volume of, trade varies directly with the degree of specialization. It is out of the manifold trade relations that the necessity for a marketing organization to carry on trade arises. We have already observed that the physical act of changing the form of raw materials, thru the progressive stages of semi-finished products, constitutes but a small part of the production process. Not only must goods be given the proper form, but they must also be available at the proper time, brought to the proper place, and put in the possession of the individuals desiring them. *Marketing,* in economic terminology, *is the creation of time, place, and possession utilities.* Consider the production of bread. First the wheat must be raised,

—a form utility is created. The marketing organization then connects the farmer with the miller, supplying the latter with the raw materials (wheat) in small amounts at the time and place he wants it. The miller changes the wheat into flour,—he adds a form utility. Then the marketing organization takes up the burden once more, and the finished flour is transferred to the baker of bread thru an elaborate organization. The baker adds a form utility, this time the finished flour being made into bread. The marketing organization here steps in for the last time and is responsible for the placing of the bread in the hands of the ultimate consumer thru such agencies as the local retail grocer. The individuals who carry on the work of the marketing organization are known as middlemen, because of their position in the productive process midway between the original producer and the ultimate consumer. Our present task is to understand thoroly this marketing organization, to evaluate its efficiency of operation, and, where necessary, to suggest the future policy to be adopted.

The Functions of Marketing.—The services performed by the marketing organization are many and very diverse. Its broad function is to coordinate the demands of consumers, on the one hand, with the productive facilities available to satisfy those demands on the other. The desires of consumers for goods, however, are numerous and complex, while each producer possesses limited resources of a certain special character. Consequently, there must be many stages between the two extremes—the beginning and the end of the productive process. "Wholesale traders get their supplies from a higher stratum of traders; each of whom specializes on a narrow range of goods but keeps in stock a large variety within that range."[1] The closer the middleman is to the ultimate consumer, the more diverse the stock he must carry; while the closer the middleman is to the farmer, miner, or manufacturer, the more specialized and restricted in scope must be his stocks. Thus, the retailer who operates a country store, or its city counterpart the department store, seeks to carry everything the shopper might need; while the man who purchases wheat from the western farmer to sell to the miller of flour, is a dealer solely in wheat. In the narrower or more specific sense, the functions of marketing are, chiefly, the assembling, grading, sorting, transporting, financing, and selling of goods, and assuming risks in connection therewith.[2] The wheat crop, for example, produced by numerous independent farmers, must be assembled at central points and must be sorted and graded in a uniform manner. It must then be shipped to trading centers and thence to the miller. Flour must be shipped from the miller to the baker. At each step the middlemen involved assume ownership of the product and con-

[1] Alfred Marshall, *Industry and Trade* (1919), p. 278.
[2] Paul W. Ivey, *Principles of Marketing Organization* (1921), pp. 6 and 7.

sequently must "carry" or finance production as well as assume the risk of price changes while the commodity is in their possession. Finally, contacts with prospective purchasers must be established, so that, when the time is ripe, the holdings, whether they be wheat, flour, or bread, can be disposed of profitably.

Middlemen and Marketing Functions.—It can readily be seen that the functions of marketing just described are essential to the efficiency of production. These functions cannot be eliminated without serious loss and inefficiency resulting. Individual middlemen, however, can be eliminated. Every move towards the integration of industry removes independent middlemen formerly serving as connecting links between the stages of production, but this is the equivalent of stating that the new organization has in fact taken over the functions formerly conducted by independent middlemen. Farmers may combine and market their wheat, without the assistance of middlemen, thru a coöperative organization of their own, but this means that they have themselves assumed the task of doing what the marketing specialists formerly did. The desirability of such an integration of functions can be estimated only by a careful analysis of the advantages and disadvantages of the farmers spreading their limited resources over an increasing number of functions, rather than concentrating their means and abilities on their basic occupation of farming.

Specialization in Marketing.—Economists have long recognized the efficiency of specialization in the manufacture of goods. There is no reason why a method that is found effective in other lines of activity should prove ineffective in marketing. Specialization among middlemen has developed along much the same lines, and for much the same reasons, that it has developed in other phases of productive activity. Middlemen specialize both by trades or commodities (simple division of labor), and by tasks or functions (complex division of labor). Food products furnish an excellent illustration. At country shipping points there are various dealers specializing in grains, live-stock, fruits, butter, and similar products. At these centers, too, are located warehouses which specialize in certain commodities, such as potatoes, or one of the grains. In the wholesale trade each firm usually specializes in one product or a closely related group of products, such as vegetables and fruits, or butter, eggs, and poultry. Even retailers specialize on a commodity basis. We have the grocery store, the butcher shop, the fruit stand, and the bakery. Viewed *functionally,* specialization of marketing includes country assembling and shipping points, transportation companies, wholesale dealers, retail stores, and financial institutions.

The degree of specialization in marketing depends somewhat on the nature of the product and the size of the shipping or distribution point. In New York city the specialization is far more developed and contains more

steps than one finds in a smaller city. As long as this specialization is the result of a need and survives on a competitive basis, it should add to the efficiency of marketing, just as the extension of the same principle has made possible institutions such as the Ford motorcar plant and the meat-packing organizations.

The various types of specialized marketing organizations can be broadly classified into wholesalers and retailers. We shall consider each of these classes somewhat more fully.

The Wholesaler.—The primary function of the wholesaler is to form the connecting link between those who create form utility and their respective markets. It would be impossible for each farmer to establish individual connections with the numerous millers who constitute his ultimate market. Likewise, the miller, unless he operates on a very large scale, would find difficulty in making individual contacts with every prospective purchaser of his finished product—flour. For every farmer and miller to develop his own marketing organization would be, if not impossible, at least an example of sheer economic waste, both in its failure to utilize the benefits of specialization, and in the duplication of effort involved. The wholesaler, consequently, developed in response to a real economic need. The farmer can dispose of a part of his crop by direct sale to the local store, thru the mail, or by calling directly at the homes of persons living in his vicinity; but the bulk of his surplus output is destined for consumption in the great urban centers of the nation, and to reach that great market the services of the wholesaler must be called upon. Local buyers or shippers purchase products from the farmers, gather them into full carloads, and ship to the central market. These dealers maintain, or have contacts with, the agencies necessary for storing and grading the product. They give the farmer immediate cash for his crop, and by use of their specialized knowledge as to market conditions they establish connections with the middlemen who carry on the next step in the marketing process. In the case of farm products the destination of the local buyer's shipment is often one of the large organized product markets. In the case of wheat, the grain is placed in a large warehouse, called an elevator, and the grain dealer given a receipt, stating the amount and grade of the grain deposited. This receipt the dealer seeks to sell at a favorable time and at an advantageous price, thru the medium of the organized produce exchange. Usually the dealer has connections with another middleman, called a broker, who buys and sells on the floor of the exchange at the order of other persons. This process will be given a little more in detail below. By this means the local buyer is connected with the individuals who desire wheat, primarily millers in the business of producing flour. While the miller is changing the wheat into flour, he himself must bear the financial burden; that is, he must "carry" the process. The transfer of the finished product

(flour in our illustration) to the retailer frequently brings into operation another group of wholesalers, known as jobbers. A jobber is a man who deals in "job lots"; that is, he buys in large quantities and distributes to retailers in small quantities as they desire it. The number of jobbing stages varies for different products. However, in every case the raw material must be brought to the manufacturer, and the manufacturer must be connected with the retailer. Each product brings into existence various strata of wholesalers, adapted to its own marketing needs.

While we have here used wheat for our illustration, the same type of organization exists, with appropriate modifications, for the marketing of other staple farm products. For other commodities, such as hardware, shoes, clothing, electrical goods, or furniture, the wholesale organization differs more markedly. The lack of standardization and uniformity of these products makes impossible the use of organized markets such as the produce exchanges.

The Retailer.—The enterprizer with whom the consuming public comes in contact is the retailer. It would be impossible for every individual consumer to deal directly with the producers of the commodities and services he requires to satisfy his wants. Desires for various kinds of food, clothing, shelter, and luxuries are of a very wide variety. Consumers demand immediate delivery in small quantities of each good as the need for it arises. The primary functions of the retailer, consequently, are the making of a careful study of the desires of consumers, the development of contacts with producers of goods satisfying those desires, and the maintenance of a stock so that immediate delivery is possible. The secondary functions of a retailer are those activities popularly called service. The retailer often grants the purchaser short time credit. Sometimes he delivers goods direct to the purchaser's door step. Often he maintains a service department that is charged with the duty of keeping in repair and working order commodities requiring such attention. Many of the larger retailers provide rest rooms, restaurants, and similar facilities for the convenience of their patrons. The relationship of the retailer to the consumer is distinctly personal.

Types of Retailers.—Before the present era of highly developed specialization the *general store* was the chief avenue thru which the commodities found their way into the hands of the ultimate consumer. These stores strove to supply practically every need of the consumer. Food, clothing, and luxuries of almost every description were kept in stock. Every store operated as an independent unit and secured its stock by purchasing, thru salesmen or a catalog, from wholesale houses. While the number of commodities handled was wide, the variety of each type held in stock was necessarily narrow. The general store still survives in many of the rural sections of the United States, but, with the growth of population

and the development of urban centers, the enlargement of the local markets resulted inevitably in the specialized type of retail store. Thus we have the grocery store, fruit and vegetable store, meat market, tobacco store, shoe store, and similar establishments. These *specialty stores* have the advantage of carrying a wide variety of goods and yet they have a volume of sales sufficient to make it profitable to carry a heavy inventory of the specialties. Their disadvantage rests in the difficulty of obtaining sufficient custom for their specialty to make the enterprizes paying propositions. The trend towards specialized shops led logically to the chain store organization to secure the economies of a larger scale of operations.[3] Chains such as the United Cigar Stores, Childs Restaurants, and Woolworth Five and Ten Cent Stores, place under a single management branch stores all over a large city and in different cities. Chain organizations can secure trade discounts by buying in large quantities. High grade executives can be employed for advertizing, purchasing, and other special managerial duties. Stock unsold in one store can be shipped into another, reducing inventory losses. Advertizing can be placed on a large-scale basis. And many of the functions performed by independent middlemen can be taken over. There are other advantages not so meritorious from the social point of view, such as the ability to drive out a local competitor in one locality by underselling him and making up the difference in other stores where the competition is not so acute. Often chain stores are started by manufacturers for the purpose of establishing direct sales contact with customers. The chief drawback has been the difficulty of getting hired managers to develop an interest in the business comparable to that which a small enterprizer puts in his own business. A man working for himself is usually a better workman than a man of equal ability acting as the hired agent of someone else.

One of the most interesting of all developments of retail selling in the larger cities is the *department store*. A department store is really "A new organization, on the plan of many specialty stores under one roof, and controlled by one organization."[4] To consumers the department store furnishes a place where most of the commodities they need can be purchased without the necessity of shopping from store to store. To manufacturers, the department store furnishes a large market for the disposition of their output. The strength of such establishments rests in their ability to utilize large-scale methods of operation, and the chief weakness rests in the difficulty of acquiring efficient managers and sales persons.

The department store has its present-day counterpart in rural communities in the *mail order house*. These institutions, such as Sears, Roebuck

[3] The remarkable growth of the chain store type of organization has caused a strong demand for legal control. Legislative action in defence of single store owners competing with chains will be discussed briefly in Chapter XXV. See *infra.*, p. 562.

[4] P. W. Ivey, *op. cit.*, p. 61.

and Company, and Montgomery Ward and Company, offer a wide variety of choice, reasonable prices, good service, and up-to-date merchandize to consumers who are very much limited in their ability to reach the well equipped shops of the city. Manufacturers often deal directly with mail order houses handling large quantities of goods, and, as in the department and chain store, the necessity for independent middlemen is much reduced. The efficiency of the parcel post mail service has been largely responsible for the success of the mail order concerns. Their most serious difficulty is the lack of personal contact. All the human elements brought so forcefully into play by the local merchants in dealing with their individual customers are lost completely to the mail order house.

The automobile has had a profound effect upon the retail marketing system in recent years. It has widened the retail trading area and tended to drive the small local retailer out of business. The chain store organization and the mail order house have at the same time experienced remarkable growth. The popular feeling against the chain store expansion has found expression in the passage of special taxes against chains by several state legislatures. Most of these laws have been declared unconstitutional by the courts.

B. The Functions of Speculation and Organized Markets

The Organized Produce Exchange.—One of the most important steps in the marketing of farm products is the buying and selling of produce on the floor of the organized exchanges. Such markets exist for wheat, corn, oats, rye, barley, cotton, flax, hayseed, cottonseed oil, butter and eggs, pork products, coffee, sugar, and similar products. The greatest and best known produce exchange in the United States is the Chicago Board of Trade. The members of this organization may be brokers who act as agents for other persons on commission, or they may be dealers or speculators, buying and selling for their own account, and frequently having no interest in the commodity dealt in other than making a profit thru anticipating price changes. Business on the floor of the exchange is conducted under a strict set of rules, some written and others merely conventional, but all equally binding. Transactions are either spot sales or futures sales. A spot sale calls for immediate or early delivery of the product sold, while a futures sale calls for delivery at some stated future date. Transactions in the spot market are usually made on the basis of samples which are displayed on tables on the floor of the exchange. The exchange furnishes its members with useful information, such as the condition of crops, prevailing prices, and the state of demand. The prices at which transactions are completed are quickly made available to the entire business world by an elaborate telegraph "ticker" system. Organized produce exchanges are

in operation in many large cities but the Chicago Board of Trade dominates practically all of them. The only exceptions to this rule are exchanges handling a local specialty.

The marketing of commodities is greatly simplified and facilitated by the existence of organized exchanges. It is on the floor of the exchange that the supply influences passing upward from the farmer, and the demand influences passing back from the ultimate consumer, meet and determine the price and distribution of the product. The exchange does not control prices, but simply supplies facilities for quick and efficient trading. Any commodity for which there is a large demand the year round, and which is uniform enough to be capable of being standardized and graded as to kind and quality, can be dealt in on an organized exchange. These characteristics are essential so that persons purchasing may be certain of just what they are getting. The existence of organized markets assures producers of a definite, continuous market for their produce, expedites and simplifies the operations of speculators, and facilitates the transfer of speculative risks from business men to professional speculators. To a large degree, the usefulness of organized produce exchanges is tied up with the usefulness of speculation itself.

The Nature of Speculation.—During the process of production, both physical production and marketing, quite a long period of time must elapse as the commodity passes from enterprizer to enterprizer. As a result, there is the danger, constantly present, that fluctuations in price during the period of production will wipe out margins of profit, and perhaps force many enterprizers into bankruptcy. Fluctuations in price may be due to changes in the desires of consumers, failure of producers properly to estimate consumers' demands in advance, and uncontrollable variations in supply, primarily due to natural forces. The first type is illustrated by changes in fashion, the second by occasional, temporary under- or overproduction of a given produce, and the third by variations in crops because of weather conditions, pests, blights, etc. If these price fluctuations can be successfully predicted by skillful individuals, they may be turned into sources of personal profit, and indirectly reduced, if not eliminated. *A purchase of goods in anticipation of demand, with the view to profiting by a change in price during the intervening period,* is called *speculation.*

In a sense, practically all enterprizers are speculators. Everyone who purchases materials or finished products for purposes of reselling later, in either the same or a changed form, assumes the risk that a change in price may take place during the period of production. The corner grocery store proprietor becomes a speculator when he purchases a barrel of sugar to be sold gradually by the pound, for he runs the risk that a change in the price of sugar will take place during the period of sale. Whether his books show a profit or a loss will depend in part on fluctuations in the price of

sugar. The huge department store assumes, in part, the rôle of speculator every time new stocks are purchased, especially when large stocks are purchased far ahead in anticipation of important seasons, such as the Christmas or Easter trade. The miner, the farmer, and the manufacturer all become speculators when they purchase raw materials, equipment, and labor without a definite assurance that they will obtain a price for the finished product sufficient to cover their outlay. Under a simple economic organization, where specialization and exchange have been but little developed, this speculative risk is relatively unimportant. Under modern conditions, however, it looms large. The concentration of people in cities, the development of large-scale production and minute division of labor have the effect of spreading the gap between the beginning of production and final consumption. Somewhere in the process of production speculative risks must be assumed. They are inevitable. The question then arises, How should they be distributed? Should every business man assume these risks as they occur in his operations, or should a group of marketing specialists assume the burden? Quite obviously, the latter is preferable, if possible. The average enterprizer has neither the type of ability nor the fund of knowledge necessary to successful speculation. A miller may be well versed in the technical problem of grinding wheat into flour, but to understand at the same time the complex, delicate set of economic influences that determine the price of wheat and flour is likely to be beyond him. If the burden of price fluctuation can be shifted to a specialist, who can make the study of the factors determining the price of wheat and flour a life work, the efficiency of production should be increased. It is true that there are some evils associated with speculation as it is now carried on—and we shall presently consider some of these, but in general it performs a useful function. We may think of it as acting like a shock absorber attached to the industrial machine. Like all shock absorbers, it does not give protection against all the blows suffered in traveling the rough road of production, but properly conducted it does eliminate the ordinary blows and soften materially the force of occasional sharp knocks. The legitimate speculator has his place in an efficient economic system. The services he renders are many, but we may conveniently classify them into two groups: the stabilization of prices, and the assumption of risks. In fulfilling both of these primary functions, the speculator performs the secondary function of providing a day-to-day, continuous market for the product in which he deals.

The Futures Contract.—It is in the marketing of produce that speculation is most highly developed, and at the same time most severely criticized. The work of the speculator can best be evaluated after a brief analysis of this problem. To begin with, it is essential that we understand the nature and use of futures sales.

A contract calling for the delivery of goods at a stated future time, and at a price agreed upon in advance, is called a *futures contract.* It is the business of speculators to deal in such contracts. If the speculator seeks to make a profit from a rise in the price of a commodity, he must buy it now and hold the product until a later time, when, if his forecast is correct, he can sell it at a gain. If, however, he anticipates a fall in price, he must make a futures sale, by which he agrees to deliver produce at a later date, and at the price now prevailing for such contracts. If his expectations are realized, when the time comes to fulfill his contract, the price of the commodity will have fallen, and he can purchase the quantity he must deliver at a figure low enough to make a profit. A specialist in cotton may believe, after a thoro study of market and crop conditions, that a drop is going to take place in the price of cotton, which drop is not being sufficiently foreseen and allowed for by other participants in the market. Let us suppose that cotton for delivery three months hence is selling at 15 cents a pound, but that the speculator believes that when the time actually arrives it will be selling for about 12 cents. Thru the medium of the organized cotton market, he will get in touch with someone—a spinner, perhaps, who requires an assured supply of cotton, or another speculator, who anticipates a rise in price. A futures sale will be made, the first speculator agreeing to deliver three months hence a stated supply of cotton at the futures price of 15 cents a pound now prevailing. If the price of cotton falls to 12 cents as he anticipated, he may buy up the cotton needed to fulfill his contract at that price, and pocket three cents a pound of profit. Actual delivery of the product contracted for (cotton in our illustration) rarely takes place when a futures matures. Instead of buying cotton in the spot market, the speculator will cancel his futures contract by buying the contract, now about to mature, of some speculator who previously had *purchased* futures in cotton. The latter holds what is in substance an order for the delivery, at once, of cotton now worth only 12 cents; hence his contract can be purchased at that rate. By purchasing this contract, our original speculator then has two contracts—one to deliver cotton at 15 cents per pound and the other to receive cotton, for which he agrees to pay 12 cents a pound. The two contracts are offset, and he receives the difference of three cents per pound, thru a process very similar to the system of clearings of checks used in banking. Should the price of cotton go up, our speculator will be forced to buy cotton at a price higher than that at which he agreed to sell it, in which case he will suffer a loss.

To engage in such a futures transaction, the speculator must agree to deliver cotton which is not at the time in his possession. He sells something he does not have. Bitter criticism has been directed against this practice, popularly known as a "short" sale. However, where an actual

delivery of the commodity results from such a sale, the case does not differ materially from the practice, quite common among manufacturers, builders, and the like, of undertaking to manufacture goods or construct a building for a customer at a specified price, even tho at the time they do not have available the material necessary to make good the agreement nor the necessary labor supply. No one ever questions the legitimacy of such transactions as these, yet "short" sales on the commodity exchanges are essentially the same in principle. Even where there is no actual delivery of the commodity, but a mere offsetting of contracts between speculators who are on opposite sides of the market, the practice is justified by the general usefulness of organized speculative activity. Without the futures contract the marketing of goods would be seriously hampered. The assumption of speculative risks by professional speculators, the nature and advantages of which will be described below, would likewise be impossible. Then, too, it must be remembered that, whatever may be the immediate effect upon price of selling something one does not own, it is counterbalanced in the long run by the necessity of making a purchase at a later date to "cover" the "short" sale, which purchase will have the opposite effect upon market price. The importance and usefulness of futures contracts will be clearer after we have traced the effects of the speculator's work on economic activity.

The Stabilizing of Prices.—Speculators in commodities play an indispensable part in the stabilizing of prices. The entire year's output of the basic crops—wheat, corn, oats, and cotton—comes to fruition at the same time. The consumption of each of these crops, however, must be spread over the entire year. This presents a real problem of adjusting supply to demand, for otherwise periods of shortage would alternate with periods of glut, and price fluctuations would be wide during the course of the year. An examination of price data, however, shows a remarkable stability of prices of the basic crops thruout the year. For example, regardless of the size of the wheat harvest, whether it is a bumper crop or a very short one, we are able to secure a supply of bread all year round at about the same price. It is the speculator who is largely responsible for this adjustment. Let us suppose that wheat is selling in January for 75 cents a bushel. The speculator, on thoro study of the probable size of the new crop in relation to the demand for it, comes to the conclusion that it will be unusually small, and that if the consumption of wheat is allowed to go on unchecked, the price will probably rise next summer to $1.25 per bushel. Seeking to make a profit, he will buy up large quantities of wheat in January (from the old crop), and store it with the view to selling it later at a gain. His act of purchase (together with that of other speculators) will increase the demand for wheat at once and the price will tend to rise, perhaps being driven up to 90 cents per bushel.

This higher price will curtail consumption and stimulate the use of substitutes for wheat in many of its less important uses. As a result of the storage and decrease in consumption, when the later summer period arrives, a much larger supply will be on hand than would have been available if the speculator had not entered the market. Instead of the price rising to $1.25, it may increase only to $1.10. The work of the speculator has then had the effect both of decreasing the price rise that would otherwise have resulted, and of adjusting the supply and demand of wheat between the two periods, steadying consumption thruout the year. Should the speculator anticipate a large crop and a fall in the price of wheat, perhaps from 90 cents in January to 70 cents in the summer, the above procedure would have to be reversed. He would sell wheat for future delivery, at around 90 cents per bushel, hoping to cover at 70 cents when his agreement falls due. In this case, the January sale would tend to lower the price of wheat at once, inducing an increase in immediate consumption. Therefore, the quantity of wheat available when the summer months arrive would be less than it would otherwise have been, and the price may only fall to 80 cents per bushel. So, by purchases and sales based on forecasts of future supply, the speculator assists in stabilizing prices and equalizing supply and demand thruout the year.

The Assumption of Risks.—The facility offered by produce exchanges simplifies the transfer of certain market risks from the business man to the speculator. Suppose that a spinner has agreed to deliver at a certain time cotton thread, the spinning of which will require five hundred pounds of cotton, the price of the finished thread being stated in the contract. It may well be that the spinner will not desire to purchase the cotton at once, but if he delays in purchasing he may suffer a financial loss should the price of cotton increase in the near future. The spinner can protect himself against changes in the price of cotton by purchasing on a futures contract, providing for the delivery of five hundred pounds of cotton at an agreed price, at the time he desires to begin production. He is then protected against unfavorable price fluctuations, for he has agreed to deliver thread at a fixed price and has contracted to obtain the required cotton at an agreed price. The spread between these two prices will cover his costs and margin of profit. The risk of price change would be shifted to the shoulders of the speculator from whom the spinner made the futures purchase in cotton. This is the simplest form of risk transference by means of a futures contract, and is possible only when the business man who is shifting the risk has already contracted for the sale of his finished product. It is really a form of what is called "contracting out."

Hedging.—The proceeding just described is sometimes regarded as a form of *hedging,* but it will clarify our discussion to reserve this term

for a more complex transaction, in which the business man seeking protection against speculative risk has not agreed in advance to sell his finished product; he must sell it later for what it will bring on the market. *Hedging consists in the making of a purchase and a sale at about the same time, the one in the ordinary trade or the spot market, and the other in the speculative or futures market, in such a way that a loss from adverse price fluctuations on the one transaction will be offset by a corresponding gain from the other.* The purpose is to assure the business man making the hedge an ordinary trade profit on a real trade contract by giving him protection against the uncertainty of price changes. The futures transaction is separate and distinct from the trade transaction; the person hedging views it as *price insurance* and will cover the contract later, not by handling the physical product, but by the method of cancelling-out, described on page 218. The trading in the actual product will always take place in the spot market, where the trader can examine samples and be certain that he is securing the grade he specifically desires. Consider the case of a country grain elevator operator. When wheat is purchased from the local farmers, it is probable that some time must elapse before the grain is shipped on to its next destination—perhaps the milling center of Minneapolis. The price of wheat in Minneapolis will generally be higher than the price paid the local farmer by an amount sufficient to cover transportation, insurance, and other costs, plus a profit to the operator for his service in collecting and moving the grain. We may assume this "distance differential" to be a price spread of 9 cents per bushel. Should the price of wheat fall while awaiting shipment, or while in transit to Minneapolis, the operator will be forced to accept a lower price and his trade profit may be wiped out. Since he does not profess to be a speculator in wheat, the wise operator shifts this risk of price fluctuations to the shoulders of a professional speculator by hedging. Let us suppose that he purchased, on August 1, 10,000 bushels of wheat from local farmers at a cost of one dollar per bushel, hoping to sell it in Minneapolis, about December 1, at a profit. Since he will have to bear the cost of storing wheat meanwhile, which we may assume to be 8 cents, then to earn his trade profit he must obtain for his wheat in Minneapolis in December \$1.17,—that is, one dollar to cover the original cost of the wheat, plus 9 cents to cover the distance differential (which includes his trade profit), plus 8 cents to cover the storage cost. Now to protect himself from loss growing out of price fluctuation, the operator will, at the very same time he buys the actual wheat, sell on the Chicago Board of Trade an equal quantity of wheat for future delivery. The date for the future delivery will be selected to coincide with the date the operator anticipates disposing of his trade wheat in Minneapolis. This date we have assumed to be December 1, and the price at which December

futures are selling in August may be assumed to be $1.18,—that is, the August local elevator price of one dollar,[5] plus a distance differential to Chicago of 10 cents, plus 8 cents to cover all the costs of holding the wheat until the future delivery date. If now, when December 1 arrives, the price of wheat has fallen to 95 cents at the elevator door, and, consequently, to $1.04 in Minneapolis and $1.05 in Chicago, the operator is protected against loss.[6] He will sell his trade wheat to the millers of Minneapolis at $1.04 per bushel,—13 cents less than the amount necessary to cover his total costs and yield his trade profit. However, in Chicago he stands to gain. He has agreed to deliver wheat on his futures contract at $1.18 per bushel, but he can cover his sale at $1.05 by purchasing wheat in the spot market, or by the method of cancelling-out. On this transaction he makes a profit of 13 cents. The change in price, then, cost him 13 cents on his real trade transaction, but yielded him a profit of the same amount on his futures transaction. These two cancel out. Should the price of wheat have risen during the period, the opposite would be true. The operator would then have lost money on his futures transaction, but would have made an equal sum on his trade transaction. He has given up all possibility of profiting by price changes, as well as protecting himself from loss therefrom. He has simply guaranteed his trade profit against the danger of being wiped out by an adverse price movement. A hedging transaction thus serves as a form of insurance to the business man, enabling him to transfer his market risks to speculators dealing on the commodity exchange.

The possibilities of hedging transactions, while greatest in those lines making use of the major crops, especially wheat and cotton, exist in varying degrees in many other lines. A trade transaction in raw material can be hedged against a speculative transaction in the same material, as in the above illustration. Similarly, a speculative transaction in raw material may be used to hedge a finished product, as, for example, the hedging of wheat against flour, raw cotton against cotton goods, or sugar against candy. To furnish protection, it is necessary that the two commodities hedged always vary in price in approximately the same manner. The price movements of both the commodity to be protected and that used as a hedge must be nearly equal during the period in question. Otherwise the insurance will be lost. For example, if the relationship between the price of raw sugar and that of candy is not relatively constant, the degree of protection given a candy manufacturer by hedging in sugar is relatively

[5] In this illustration, the anticipated future local price is assumed to be the same as the present cash price, *i.e.*, one dollar. Ordinarily, it would be a little higher or lower, depending on which way the market anticipates the price will move. Our assumption relieves the case of confusing complications, however, without changing the essential principle.

[6] There will be no storage or other costs for holding wheat this time, for we are now dealing with wheat for immediate delivery.

slight. Ordinarily, however, such relationships are sufficiently close to provide fairly complete insurance, tho it is not perfect. In some cases, substitute articles have such close price relations that it is possible to hedge one commodity against another, as, for example, lard against cottonseed oil. Hedges of this type are somewhat unusual, however.

Organized Stock Exchanges.—The market prices of corporate securities (stocks and bonds) rise and fall as the earnings and future prospects of the corporations by whom they were issued rise and fall. These price movements are wide and diverse, and speculation is therefore possible in a manner similar to the speculation in produce. Organized exchanges have evolved to facilitate securities speculation, the dominating institution of this type being the New York Stock Exchange. This organization is a private, unincorporated association of 1,375 members. The members are brokers who execute orders for other persons on commission, and traders who deal in securities on their own account. The privilege of trading on the floor of the exchange is valued very highly, memberships (known as "seats") in the exchange having been sold for as much as $322,000 (in 1932). All transactions are conducted under a strict set of rules, enforced by a governing committee, and only securities passed on by a "listing" committee of the exchange are dealt in. To be listed, the corporation which issued the security in question must comply with definite requirements designed to disclose the status of the business; and only well established, legitimate enterprizes are accepted. Thus, while the stock exchange does not guarantee the securities traded in, the investigation made by the listing committee assures the general public that the corporations concerned are *bona fide,* active enterprizes. Securities of new corporations, issues of corporations reluctant to permit investigation of their affairs by the listing committee, and questionable securities, must find a market elsewhere. Some of the minor stock exchanges have less rigid restrictions and list securities refused by the New York Stock Exchange. There is also a tendency to list small local corporations on the local exchanges in various cities scattered over the country.

S.E.C.

The Functions of Stock Exchanges.—While many of the sales made on the floor of stock exchanges are by the order of persons desiring to make permanent investment of accumulated savings, the vast majority of the transactions are made for speculative purposes. Since every issue of stocks and bonds is fixed in quantity, and not subject to seasonal or annual variation as in the case of crops, speculation in securities cannot be defended on the ground that it has a stabilizing effect on the supply. Nor does it provide insurance, thru hedging, for the transfer of risks by trade dealers to speculators. There are, however, three useful economic functions which somewhat justify stock speculation. These functions are:

the establishment and maintenance of a continuous market for securities; the guiding of new capital into the most productive channels; and the discounting of future business conditions.

The existence of a continuous market in which securities may be immediately converted into cash, should the owner so desire, stimulates investment and aids in the use of bank credit. The average person would be unwilling to invest in corporate securities if the possibility of selling them quickly in case of need were removed. Banks would be handicapped in granting loans, for they can accept stocks and bonds as safe collateral only when it is possible to watch constantly their market value and dispose of them immediately, should it be necessary to protect themselves against default by the debtor.

New capital is guided into the most productive channels by the publicity given security prices and yields in the daily reports of stock exchange transactions. Investors will normally avoid new issues made by industries showing a poor yield and favor issues of industries showing high earnings and bright prospects, as indicated by the market prices of securities already outstanding.

The discounting function of the stock market is receiving more attention of late. Professional speculators make it their business to secure all possible information, both as to the probable future trend of business activity as a whole, and as to the outlook for certain specific industries. By acting on their conclusions, they steady the market prices of securities and reduce the danger of wide, sharp swings in prices. This gives bankers and investors more time to protect themselves in face of adversity. The trend of security prices in general also takes on a new significance, for it serves as a barometer of the future prospects of industry; the stock market price movements usually anticipate by some months changes in business activity itself.

In a later part of this chapter, we shall find that there are also many abuses of the facilities of stock exchanges, which to some extent offset these advantages.

C. Some Defects of the Marketing Process, and Their Correction

The Cost of Marketing.—The discussion up to this point has tended to justify the major features of our marketing organization as performing necessary functions, and doing so with a fair degree of efficiency. It does not follow, however, that the organization is free from defects. In fact, few aspects of the present industrial system have received criticism comparable to that directed against the work of middlemen in the marketing of goods. The chief criticisms are two: first, marketing is said to absorb

too large a part of the total production cost; and second, the ratio of marketing costs to total costs is constantly increasing, indicating the development of waste and inefficiency. As to the first point, it has been estimated that half the consumer's dollar is absorbed by marketing costs.[7] The cost of marketing is said to be greater than the cost of physical production, altho physical production employs more persons than the process of marketing.[8] One authority estimates that 7,716,561 persons or nearly 16 per cent of all those gainfully employed in the United States are engaged in the wholesale and retail trade.[9] The factory prices of many products sold under very competitive conditions ~~such as sewing~~ machines, typewriters, electric cleaners, and ready-made clothing, take but a fifth, or less, of final retail selling price.

As to the second point,—the criticism that marketing cost is increasing, —the following interesting table indicates the trend:[10]

THE PERCENTAGE OF TOTAL ECONOMIC EFFORT DEVOTED TO MATERIAL PRODUCTION AND TO MARKETING

Year	*Material Production Effort*	*"Commercial Effort" Selling and Distribution*
1850	80.2%	19.8%
1860	75.1	24.9
1870	72.0	28.0
1880	67.2	32.8
1890	63.3	36.7
1900	59.9	40.1
1910	53.5	46.5
1920	49.6	50.4

Studies of specific commodity groups furnish corroborative evidence. Using the period 1910 to 1914 as a base, the percentage of the retail price received by the farmer from the sale of ten products (wheat bread, eggs, butter, etc.) decreased from the average of 51 per cent to 45 per cent by 1927.[11] Statistics of foreign countries show a similar growth in marketing cost.[12]

While such data are interesting and may be useful for many purposes, they mean but little as an index of the efficiency with which commodities are marketed. A certain product may be produced and sold at five dollars a unit with just the most rudimentary marketing organization, absorbing less than 10 per cent of the total cost. That same product, however, might

[7] P. D. Converse, *The Elements of Marketing* (1930), p. 6.

[8] *Ibid.*, p. 14.

[9] L. S. Lyon, article on *Marketing*, published in the *Encyclopedia of the Social Sciences* (1932), p. 137. Data based on U. S. Census.

[10] Stuart Chase, *The Tragedy of Waste* (1925), p. 213 (quoted by Chase from a study by Sidney A. Reeves).

[11] F. E. Clark and L. D. H. Weld, *Marketing Agricultural Products* (1932), p. 452.

[12] L. S. Lyon, *op. cit.*

be efficiently marketed and sold in large quantities, enabling the producer to introduce numerous economies of large-scale production. The price might then fall to four dollars per unit, altho the new, highly developed marketing organization might then be absorbing 60 per cent of the total cost. It would be the height of foolishness to call the marketing cost of 60 per cent in the second case an indication of inefficiency, on the ground that formerly the product had a marketing cost of only 10 per cent. The improvement in marketing resulted in economies that enabled the producer to drop the price from five dollars to four dollars per unit, and this would indicate *a real increase in production efficiency.* Marketing specialization takes place only when a reward in the form of profit is in the offing, and a product having a high marketing cost is more apt to be an example of a product, the marketing of which is a difficult problem, than it is an example of waste. In addition, the increasing percentage of marketing costs to total costs, as the years go by, reflects in a measure the increasing complexity of economic life. The ever-increasing specialization, as we have already noted, necessitates more effective and elaborate marketing organization. The increase of marketing costs indicates a growing need for such services, rather than a general development of inefficiency and waste.

Scientific Management and Integration in Marketing.—While the general growth of the marketing organization cannot be regarded as conclusive proof of excessive waste, there is naturally some inefficiency in it, just as there is in all other aspects of our business life. This inefficiency may take the form of poor methods of management within the individual marketing concern. Retail or wholesale establishments may overstock or understock certain commodities. Merchandize will then lie idle on shelves or in warehouses, at the same time that the supply of other goods is inadequate. There may be too many clerks to wait upon customers or handle the records. Establishments may be poorly arranged, and there may be lack of coördination among the different departments. These are but a few of the many opportunities for mismanagement, all of which will be reflected in excessive marketing costs. The remedy for them lies, not in a general denunciation of the whole marketing machinery, but in the advancement of better management policies in the marketing establishments. In Chapter IV we discussed some of the measures which may be introduced into management to secure greater efficiency of production. Marketing is one phase of production, and those same methods are applicable here. Careful choice of plant location, scientific laying out of the plant, job analysis, efficiency wage systems, and an adequate personnel department—these can all be employed to reduce the losses of marketing, in so far as they arise out of incompetence.

It is also true that there are cases in which the number of stages and

exchanges involved in the marketing process can be reduced. Under the pressure of intense competition some such reduction is already taking place, thru the integration of marketing operations. This is merely one phase of that general tendency to integration which was described in Chapter V. Wholesalers often spread out and embrace several of the marketing steps, in some cases even going into the business of manufacturing the product they handle. They also frequently adopt and advertize their own private brands, seeking in this way to go over the head of the retailer and force him to carry their product because of the pressure of demand so created. While the wholesalers have been spreading out towards the retailer and manufacturer, the manufacturers and retailers have, on their part, retaliated by taking over part of the wholesaler's work. Many large manufacturers send out salesmen direct to the local jobber or retailer, and in some cases they build up their own complete selling organization. Not a few have even taken over retail stores, thus completing the integration of all the steps in the marketing of their product. Retailers have also pushed back into the wholesaling stages. Such integration frequently results in greater efficiency, not only by eliminating unnecessary steps or duplication in the marketing process, but by the better coördination of the various stages.

Coöperation in Marketing.—Another development by which some groups have tried to effect economies in marketing is thru the organization of coöperative establishments. A coöperative marketing organization is one in which a number of consumers or producers band themselves together for the joint purchase or sale of the commodities they use or produce, thereby dispensing with the usual middlemen who perform these functions. It is to be noted that they do it, however, only by setting up another organization of their own—the necessity for marketing machinery remains.

Consumers' coöperation involves the establishment of a store (usually retail) by a group of persons who intend to become its customers. The purpose is to secure commodities for consumers on better terms than could be obtained from the retail store which is operated for profit. The consumers supply the capital, but each stockholder ordinarily has only one vote, regardless of how many shares he owns. A fixed rate of interest is paid on the stock, and any profits above this are distributed to the stockholders, not in proportion to their investment, but in proportion to the amount of goods each one has purchased from the coöperative. Thus the customers get the profits which in the usual retail establishment go to the proprietors.

no profits

With but few exceptions, consumers' coöperation has been distinctly a British development. In 1844 a small group of English weavers organized the now famous Rochdale Coöperative Store. Shares of stock

were sold to persons living in the vicinity at one pound per share, the low price giving opportunity for persons of small means to participate. The initial payment could even be made on an installment basis if desired. The rate of interest on the stock was fixed at five per cent, and profits were to be distributed at given intervals on the basis of purchases made in the store. Each stockholder was given but one vote regardless of his holding of stock in the coöperative, in order to insure democratic control. The business was conducted strictly on a cash basis. The idea spread rapidly, and by 1925, approximately five million persons representing 43 per cent of all English families were members.[13] Sales for that year were $886,527,373.[14] This type of coöperation may lead to a number of advantages. Retail prices to the consumer are reduced by the elimination of the retailer's profit, the savings made in advertizing, and general low selling cost. Loyalty of the members assures steady sales, and at the same time assists in obtaining managers and help at low rates. A saving is often made by reducing the variety of goods held in stock, since the competitive selling pressure is much reduced. The difficulties encountered, however, have been many. The cash basis of sales, the reduction of the variety of goods held in stock, and the failure to utilize selling appeals, have all limited the success of these organizations. The danger of inefficient management is great because of the low salaries paid. The coöperative movement was later extended to wholesaling and manufacturing in England. Wholesale coöperative organizations own bakeries, canning factories, shoe factories, flour mills, wheat farms, coffee plantations, and coal mines. National coöperative societies have been established and considerable integration of the various marketing stages has taken place. Germany is the only country utilizing consumers coöperation on a scale comparable with England, but the movement is strong thruout Europe.[15] Outside of a few farmers' granges, and some organizations drawing their membership from the foreign-born portions of our population (*e.g.*, the Finns), little headway has been made by consumers' coöperation in the United States. Total sales average less than one-half of one per cent of all retail business transacted. American wages are higher than in Europe, so that the savings of a few cents appeals less to the American citizen; and he is so individualistic that he prefers to purchase wherever his fancy dictates.

Another phase of coöperative buying may be described as *retailers' coöperation*. Intensive economic pressure, largely in the form of keen competition, has brought about coöperation at the two ends of the pro-

[13] P. D. Converse, *op. cit.*, p. 693.

[14] *Ibid.*

[15] The coöperative movement of Soviet Russia is more important than that of any other country, but since it is not functioning within a capitalistic system, it has not been included here.

duction process—retailing and farming. Direct selling by large-scale businesses, such as the department store, the mail order house, and the chain store, has impressed on the small retailer the fact that he cannot survive unless he is able to purchase his goods in large quantities at wholesale prices. There have consequently developed coöperative organizations of retailers for the purpose of accomplishing this. Such organizations can deal directly with manufacturers, obtain trade discounts, eliminate at least part of the wholesaler's profit, and, by branding their standard products, advertize as a unit. Sometimes the organization is an incorporated body acting practically as a substitute for the independent wholesaler, but often it is little more than a buying syndicate. Retail coöperation has not had the success many persons hoped for it. Strong opposition on the part of regular wholesalers, lack of loyalty among members, and the low-grade ability often found among small shop-keepers, have proved serious obstacles to overcome.

In the United States, *agricultural coöperation*—a form of *coöperative selling,*—has been more successful than consumers' coöperation; but it also has grown slowly. The organizations formed are chiefly for the purpose of effecting the unified sale of a product produced by many small farmers. This type of coöperative marketing is illustrated by the California Fruit Growers' Exchange. This organization is a combination of local citrus fruit growers located in southern California, and serves as a centralized marketing agency. The Exchange maintains agents in the various eastern cities who report on market conditions and prices, thus facilitating the most profitable distribution of the fruit. The Exchange can see that shipments are regular, in large lots, and can maintain most favorable relations with the railroads. In the northwest several strong coöperative organizations exist for the marketing of grain. Other products in which this method of organization is made use of are cattle, potatoes, all kinds of fruits, and tobacco. Many coöperative creameries are now in operation in Minnesota, which state is the stronghold of the movement in this country. This kind of coöperation has also been successful in Europe, especially in Denmark. Such organizations bring gain to the farmer by improving the quality, packing, and grading of his product, eliminating the profit of the local buyer, reducing the shipping costs, and arranging a more steady flow of products to the market. It has experienced the difficulty, common also to consumers' coöperation, that it is hard to get farmers to realize the need of competent specialists to manage the coöperative. They have been unwilling to pay the salaries necessary to secure such management. In many cases the exaggerated hopes of the farmers have been disappointed severely, when they discovered how great are the costs of taking over the middleman's functions.[16]

[16] For further analysis see Chapter XIX, The Plight of Agriculture.

Taken all in all, coöperative marketing cannot be expected to reform very radically all marketing organization. Where conditions are favorable, it can function efficiently and will effect economies; but it should not be looked upon as a general panacea.

The Abuses of Speculation.—While in general speculation performs useful economic functions, there is always some danger of illegitimate speculation which will hamper rather than facilitate the efficiency of production. The ease with which trading both in produce and securities can be accomplished induces unqualified persons to use the organized exchange as a gambling institution. If they guess wrong, serious disruption of the market may result. Feverish periods of rising and falling prices, having no basis in the real conditions of industry, are frequently caused by heavy speculative buying or selling on the part of the general public. It is difficult to prevent these gambling operations, but some degree of protection results automatically from the transactions of the professional speculator. Should the market price move in the wrong direction, the professional speculator, with his thorogoing knowledge of marketing conditions, will tend to increase his operations and thus offset the transactions of the novice, based on incorrect forecasts.

A more serious danger is that of the manipulation of prices by cliques of professional speculators. Since the speculator earns his profit thru fluctuation in prices, there is a strong temptation to control price fluctuations, if possible. Illustrations of this practice are the spreading of false rumors, washing sales, and cornering the market. The spreading of false rumors has its greatest effect on the non-professional speculator. The evil can best be reduced by widespread publicity of all the available information as to the true condition of the market. Wash sales are fictitious transactions made thru the exchanges for the purpose of raising or lowering the prices of stocks or of produce. An individual or a group of individuals may buy and sell a commodity at the same time and at a price agreed upon, without any intention of delivering or receiving the goods, but merely, by their bidding and taking, to influence the price upward or downward for their own advantage. Such transactions are forbidden by the rules of most exchanges, but when the manipulators are not brokers, but are professional speculators using one broker to buy and another to sell, detection is very difficult. During the United States Senate investigation of fluctuations in wheat futures, it was asserted that the majority of the days on which unusually violent price fluctuations took place were days on which one or more of the more important traders bought or sold 2,000,000 or more bushels of May wheat.[17]

The corner is even more difficult to prevent. A group of speculators may buy up all the available supply of a product and at the same time

[17] See F. L. Vaughan, *Marketing and Advertizing* (1928), p. 171.

absorb all the offerings of "short" sellers. The result will be that the "short" sellers will find themselves unable to carry out their agreements to deliver, when their contracts fall due. "A corner, then, is the result of an oversold market, bringing about a situation in which the sellers are unable to fulfill their contracts and have to buy back from those to whom they have contracted to deliver, or, in other words, settle their contracts by paying over to those who have cornered the market the difference between the price they have contracted to sell for and the price which manipulators have succeeded in bringing about."[18] It is practically impossible to obtain sufficient monopoly control to corner an entire crop. Successful corners are more often restricted to the futures maturing in some one month. The most famous corner was the Leiter corner of the wheat market in 1897. A later attempt by Leiter was a failure. It is much less difficult to manipulate the price of a single stock than it is to affect the price of produce. The funds necessary to accomplish it are smaller, and there is a known, fixed supply of shares outstanding.

Another evil, common to both types of exchanges, is the irresponsibility of the brokers who deal on them. These brokers handle large sums of money for their customers, which are virtually trust funds committed to their care for investment, much as funds are entrusted to a bank. The stock brokers, also, have many shares of stock in their possession which belong to their patrons. The opportunity to profit by speculating on their own account with these funds is sometimes a temptation too great to be withstood. Brokerage houses often fail as the result of mismanagement or actual fraudulent conversion of the funds entrusted to them, and their customers thereby lose large sums of money—not infrequently the savings of a lifetime.

Whether organized speculation actually has had the effect of reducing price fluctuations, is still a moot question. Reliable evidence is lacking. One study of stock price fluctuations from 1872 to 1927 concludes that fluctuations were greater in the period of 1897 to 1914 than in the earlier years of 1872 to 1896, and that they were greater in the period 1915 to 1927 than in either of the first two periods.[19] "Not only are the monthly and annual spreads greater, indicating that prices fluctuated over a wider range with the passage of time, but also the average variation of the indexes from month to month shows an appreciable increase in each successive period."[20]

Correcting the Abuses of Speculative Markets.—The best means of preventing such pernicious activities as the making of fictitious sales, "cornering" the market, and other devices for manipulating prices, is the

[18] J. G. Smith, *Organized Produce Markets* (1922), p. 112.

[19] W. J. Fields, *Speculation and the Stability of Stock Prices, Quarterly Journal of Economics,* Vol. XLVII, February 1933.

[20] *Ibid.,* p. 365.

adoption and rigorous enforcement by the exchanges themselves of rules prohibiting such practices on the part of their members. "Corners" in the produce exchanges can be broken up by a rule that in case "short" sellers cannot make deliveries as called for in their contracts, a committee of the exchange may be empowered to fix a fair price at which settlement of the outstanding contracts shall be made. This is the policy of the Liverpool Corn Trade Association. Every transaction on the exchange should be a legitimate purchase and sale, which obligates the parties to deliver and accept delivery (unless later the contract is offset after the manner described above). Such rules will not be effective, however, unless accompanied by the actual inspection, in as rigid a manner as a bank examination, of the records of the members who deal on the exchange. A good example has been set within the past few years by the New York Stock Exchange, which now makes inspection of the books and records of its members from time to time in a most searching manner. Other exchanges thruout the country, however, are generally much more lax in their rules and enforcement machinery.

The fact that the exchanges are private organizations limits decidedly their power to control. Hence, in response to public demand, considerable governmental supervision has been established in recent years. By authority of the Grain Futures Act of 1922, a Grain Futures Administration, under the Department of Agriculture, has been instituted, which has power to control the rules adopted by grain exchanges, to call for any information it desires concerning the transactions which take place on the exchanges, and to compel brokers to keep records of their transactions open to its inspection in order that fictitious trading or manipulation may be detected. Exchanges can operate only under government license, and if the Grain Administration finds that their rules are not sufficiently strict or not well enough enforced, upon its recommendation these licenses may be revoked. The Administration has made some extensive studies of speculators' accounts, to determine how far they can be correlated with price movements, and it is probable that the continuation of this work may lead to much more authentic information as to the exact effect of speculative activity than we now possess. Regulation might thereby be built upon a much more enlightened basis. With reference to speculation in securities, two important federal laws have been passed. The Federal Securities Act of 1933 sought to protect the investor against erroneous information by empowering the Federal Trade Commission to control the issue of new securities. The law required filing with the commission, and presentation to the buying public, of complete and accurate information concerning capital structure, earnings, and the conditions of underwriting of the issuing corporation. Directors of the issuing corporation, officials of the underwriting company and even accountants whose statements are utilized in the selling campaign are liable for false or inadequate information. The passage of the Securities Exchange Act of 1934

transferred these powers in a somewhat modified form to a new commission known as the Securities and Exchange Commission. This law gave the new commission wide powers of control over securities exchanges and over-the-counter transactions. The Federal Reserve Board was given authority to set restrictions upon the use of bank credit for securities trading. The scope of the Commission's work is indicated by the fact that from October 1933 to the end of 1936, the total amount of validly registered securities was over eight and one-half billion dollars.[21] Registration statements covering more than two thousand security issues had become effective by January 1937.[22] A considerable number of issues have been refused approval by the Commission and numerous cases involving the use of fraudulent practices have been litigated.

Experience with the new law indicates that it has been successful in mitigating such abuses as swindling investors and withholding of accurate information from the investing public. The procedures of trading and investment have also been improved. The Commissioners have moved cautiously and the real importance of the legislation will depend upon the wisdom of their action in interpreting and exercising their authority.

Summary

Marketing is the creation of time, place, and possession utilities. The machinery of marketing becomes more elaborate as specialization increases. Marketing coördinates consumers' demands with the means of satisfying them, and performs other minor functions. The presence of middlemen, who specialize in the various stages and types of marketing, is essential to this process. The chief types of marketing specialists are wholesalers, and retailers —such as the general store, specialty store, chain store, department store, and mail order house.

The marketing of commodities is facilitated by organized markets, known as produce (or commodity) exchanges, where brokers and dealers trade and speculate in staple commodities. Speculation is the purchase or sale of a commodity in anticipation of price changes, with a view to profiting therefrom. It cannot be eliminated from industry, and it is best carried on when in the hands of professional speculators. Speculation in commodities stabilizes prices, equalizes consumption and supplies, and reduces business risks. By means of hedging contracts associated with dealings in futures on the produce exchanges, business men are able to transfer most of the risks from price fluctuations to professional speculators. Much of the work of speculation depends upon the use of futures contracts, which call for the delivery of a commodity at a stated future

[21] Jay W. Blum, *The Federal Securities Act, 1933–1936, The Journal of Political Economy,* February 1938, p. 75.

[22] *Ibid.*

time, the price being agreed upon in advance. Speculation in stocks and bonds, while having no stabilizing effect upon supply, performs important economic functions, *viz.*, the maintenance of a continuous market for securities, helping to guide new capital into the most productive channels, and the "discounting" of future business conditions.

The rising costs of marketing do not indicate that the marketing process is wasteful, but there is some inefficiency in the conduct of individual marketing businesses. This can be corrected by the spread of scientific management and the integration of marketing steps. Coöperative marketing, where consumers or sellers band themselves together for the joint purchase or sale of goods, may save the coöperators the profits of middlemen; but it cannot be expected to make radical improvement in marketing machinery. Speculation in both produce and stocks is characterized by a number of abuses, such as the ill-informed operations of non-professional outsiders, the manipulation of prices by fictitious sales and corners, and the misuse of funds entrusted to brokers. Remedies suggested for the reduction of these evils are: the maintenance of strict rules by exchanges and their enforcement by inspection of members' records, the oversight of operations on the exchange by governmental bodies such as the United States Grain Futures Administration and the Federal Securities and Exchanges Commission, and the rigid examination of brokers' accounts by constituted authorities. A federal system of licensing brokerage firms should be established.

SUGGESTIONS FOR FURTHER READING

An excellent discussion of the economics of marketing is F. E. Clark's and L. D. H. Weld's *Marketing Agricultural Products* (1932). A keen but brief analysis is that of Alfred Marshall, *Industry and Trade* (1921), Chapters V–VII inclusive. *Outlines of Marketing* (1936) by Agnew, Jenkins, and Drury is a broad, rather than intensive, institutional study of the field. P. D. Converse, *The Elements of Marketing* (1930), is a comprehensive, reliable work. J. F. Pyle's *Marketing Principles* (1931) is a very satisfactory text. P. W. Ivey's *Principles of Marketing* (1921) contributed much to the writing of several sections of this chapter. F. L. Vaughan's *Marketing and Advertizing* (1928) is unique in the vigor of its social approach. See also, W. D. Moriarity's *The Economics of Marketing and Advertizing* (1923). G. W. Hoffman's *Future Trading* (1932) is a thoro study of the organization and operation of commodity markets. One of the best discussions on speculation is an English work by J. G. Smith, *Organized Produce Markets* (1922). An able analysis of modern trends is M. T. Copeland's *Marketing,* an article in *Recent Economic Trends* (1929), Vol. I, pp. 321–421. For the work of the stock exchange see S. S. Huebner, *The Stock Exchange* (1922), and J. E. Meeker, *The Work of the Stock Exchange* (1930). The Twentieth Century Fund's *The Securities Markets* (1935) is excellent for its analysis of stock market control. For the coöperative movement see J. Baker's *Coöperative Enterprize* (1937) and M. W. Child's *Sweden: The Middle Way* (1936).

CHAPTER XII

THE PRICE SYSTEM AND ITS CONTROL

A. The Operation of the Competitive Price System

Exchange and the Price System.—In the last chapter we learned something of the elaborate machinery which has been developed to carry on the intricate operations of exchange occasioned by the minute division of labor now prevalent in industry, and of the problems encountered in trying to improve the efficiency of that machinery. In the present chapter we shall consider another feature of our economic life which plays a very important part in the exchange process. We refer to the price system. When industry is divided into thousands of separate parts, each managed by a different group of individuals, without any central authority to direct or control it as a unit, there must be some means of keeping the whole coördinated and in balance. Otherwise industry would be wasteful and chaotic. Too much of some things would be produced, and too little of others. Plants making textiles might be kept idle because not enough yarn was being produced to provide them with raw material, while leather tanneries might be closed down because they had produced leather far in excess of shoe manufacturers' requirements. It is the function of the price system to prevent this lack of balance in industry, or to correct it when it occurs, thereby providing the necessary guidance and coördination. It does this thru the adjustment between the demand for and supply of goods which is brought about by the movements of prices in the markets. Let us examine this process in greater detail.

Individual Prices (Values) and the Price Level.—It must first be made clear that we are now concerned only with the prices of individual commodities, relative to each other, and not with the general level of prices. The prices of individual commodities are measures of their values, and they move upward or downward *with respect to each other,* in response to changes in the conditions of demand and supply for them, irrespective of any change which may be taking place in the level of prices taken as a whole. Thus, while prices in general are rising, the price of potatoes may be falling, due to a decrease in their value; while the price of sugar may be rising much more rapidly than other prices, because its value is increasing. Changes in the general level of prices result from

changes in the *value of money,* and not of particular commodities. When the value of money is falling, all prices tend to rise, because it takes more money to buy things than before; and when the value of money is rising, prices tend to fall. But these changes are different from, and largely independent of, changes in the prices of individual goods due to changes in their demand or supply. We shall consider the problem of changing price levels in Chapter XV. For the present we are concerned with those individual prices which measure the values of particular goods. It is these prices which we have in mind when we speak of "the price system."

How the Competitive Price System Works.—Prices may be established by bargaining in a competitive market, or they may be controlled by a monopoly. We must presently consider some of the price problems which arise in case of monopoly; but it will be simpler first to discuss those which are associated with competition. Let us see how the price system works where competition prevails.

A characteristic of modern competitive markets is the tendency known as the *law of one price,* with which students of economics are familiar. According to this law, competition tends to compel a seller to offer his wares to all his customers on equal terms, and on the same terms as his competitors. Otherwise the business would all go to the lowest seller. Hence, at a given time, a commodity tends to sell at the same price thruout the whole of any one market. Where competition is effective, this rule will be observed; but it must not be expected to work out *exactly.* A truly competitive market is one where both buyers and sellers make their quotations openly, so that each producer knows what others are getting; but this condition is never fully realized. Hence some differences of prices are likely to exist, especially in retail markets, where competition among buyers is least keen. The differences are usually small, however, and the rule holds approximately true. It has an important bearing upon one of the problems to be taken up in a later paragraph. 1

means price will be such that supply will be taken of the market.

The price established for any commodity tends to be such as to make the demand for it equal to its supply. It is easy to see why this is so. If, at the price prevailing, the market demand exceeds the market supply, not all the buyers can be satisfied, and competition among them to secure what they need will force the price up, until the demand is checked. The rise in price will encourage sellers to produce more of it, and so supply increases until it equals the demand. On the other hand, if, at the price ruling, supply exceeds demand, producers will not be able to sell all of their stocks. They will be forced to lower prices until demand is stimulated and production checked. Equilibrium will then be restored. Thus, the competitive price system tends to maintain a nice adjustment in the production and consumption of each commodity. The equality of demand and supply is achieved at that price where the marginal price-offer (mar-

ginal demand) is equal to the cost of production, the marginal price-offer being that of those buyers who are just induced to purchase at the prevailing price, and who would drop out if it were to go any higher. By this means, quantity demanded is not only made equal to quantity supplied, but the price offers of consumers are brought into equality with the price requirements (that is, the costs) of producers. The details of the process by which this adjustment is brought about are described in any textbook setting forth the principles of economics, and need not detain us here. We are concerned with the effects of the price system, and may take its mechanism for granted.

The Economy of the Price System.—We must keep in mind thruout our study that it is the problem of our industrial organization to achieve economy in the use of our productive resources. In achieving such economy, we should avoid the dissipation of those resources in wastes resulting from inefficiency of production. Now, it can be shown that there are factors at work in the competitive price system which tend to stimulate efficient use of our productive resources. Prices under competition are fixed at producers'
1 costs. Each producer is desirous of securing as large a share of the sales in the market as he can. He can do this only by keeping his price low. That means that he must cut his costs to a minimum. With the law of one price prevailing, each producer must be able to keep his costs down to that of his competitors, or he will be eliminated in the struggle. Hence, the principle by which prices are fixed at costs operates in the direction of industrial efficiency.

We have also learned (in Chapter I) that our productive resources are scarce, in relation to our desires, and that, therefore, economy requires that they be used only for our most important needs. People should not be allowed to dissipate valuable productive resources in the satisfaction
2 of trivial whims when more important needs are not provided for. The price system helps to achieve this principle of economy also. To begin with, it forces every consumer to pay as much for his goods as other consumers will pay. This prevents any purchaser from obtaining goods which are more valuable to someone else than they are to him. In a similar manner, the agents of production are restricted to the strongest demands, thru the principle of opportunity costs. Producers, in responding to the price-offers of consumers, are led to bid for the agents of production which they must use in manufacturing the goods necessary to satisfy the demands for their products. Thus, prices are set upon the agents of production by a competitive bidding among enterprizers similar to the bidding among consumers for consumers' goods. These prices are the costs of production which business men must pay. Since they are set by competitive bidding, it follows that each producer must pay as much for his capital or his labor as any other producer is paying. Consequently, the use of any agent in

production involves a cost, which is determined by its value in its possible alternative uses. This is the principle of opportunity costs. It means that no productive agent can be employed in the production of some good which is less in demand than some other good to which it might have been devoted. It is a principle of deep significance for our industrial life, for it operates to bring about that economy for which we are striving. If any producer tried to manufacture a commodity which was less wanted by consumers than some other commodities with which they were not yet provided, the demand for the latter would be so strong, and for the former so weak, that the price of the unwanted commodity would be below its cost, due to the high value set upon the agents of production by the bids of enterprizers who were seeking to use it for the article which was in great demand.

Obstacles to Economy in the Price System.—Altho it is the function of the pricing process thus to promote economy in the use of our productive resources, the full attainment of such economy is interfered with by five obstacles:

In the first place, the price system causes production to follow demand, and demand rests partly on the choices of consumers. Unfortunately, consumers do not always spend their incomes wisely. This difficulty was fully discussed in Chapter III, where it was pointed out that the weakness and ignorance of human nature, coupled with the subtle coercion and even deception of anti-social advertizers and salesmen, prevent consumers' demands from being a perfect indicator of human need. The result is that they buy things of little or no benefit instead of getting the things which would contribute most to their welfare. This is largely responsible for that malproduction, or creation of illth, which we have found to be one of the great wastes of our economic organization.

A second obstacle, which again prevents demand from guiding production according to needs, lies in the fact that consumers' incomes are unequal. Some people have much more money to spend than others. Hence they exercize more control in the market. As their incomes are very large, they can spend a considerable proportion of them for relatively unimportant things, such as expensive jewelry, racing automobiles, gold cigaret cases, and the like. A beautiful example of this is contained in an advertizement published by a prominent Philadelphia department store in 1931. It was headed, "If you are not a millionaire, don't read this," and then announced, in elegant phrases, that there was being offered for sale a "majestic flacon" of rare perfume whose "price will obviously be in keeping with its rarity." This price was no less than $1,920! At the time this advertizement appeared, approximately a quarter million workers in the city were totally unemployed, and another 200,000 were on part time. No doubt some "fortunate woman" got the perfume, while the unemployed went without the

necessities of life. Thus it is that under the competitive pricing system productive energies are devoted to supplying capricious luxuries for the rich while important needs of the poor go unprovided for.

It was said above that our price system tends to keep producers' costs at a minimum; but producers, like consumers, do not always act wisely. As we saw in Chapters II and IV, many economic wastes creep into business operations because enterprizers are ignorant and inefficient, failing to use the most advantageous techniques of production. The result is that costs are not as low as they might be, and maximum economy of production is not attained.

The fourth obstacle to the attainment of economy by the price mechanism rests in the frictions of industry which prevent the rapid adjustment of demand and supply. If buyers and sellers were always alert and well-informed, and if labor and capital were always perfectly mobile, no maladjustment between demand and supply could long endure, for prices would quickly reveal it and as quickly correct it by the appropriate redirection of economic effort. Unfortunately, the process of readjustment may be so slow that demand and supply will remain out of balance for a long time, during which the prices of the commodities concerned will not be at their normal level. There may be over-investment in some kind of fixed capital, such as shipyards. The excess equipment will depress the prices of ships and the value of ship-building equipment, but this will not bring about the needed reduction in supply, for neither the ships nor the shipyards will soon wear out, and they cannot readily be converted to other uses. The result will be cheaper shipping rates to users but losses to ship-builders and ship-owners. Again, the destruction of some crop,—such as cotton, by an insect pest like the boll weevil—might raise the price of the product for several seasons without bringing about the needed increase in its output. An uncorrected scarcity of cotton would continue while prices would be too high for consumers. So we see that because of the slowness with which demand and supply come to equilibrium, prices, if left to themselves, may not distribute our resources to the greatest advantage.

5 Finally, we must recognize that the price system which we have been analyzing is based on the assumption that free competition exists. In fact, however, competition is by no means universal in industry. The processes of integration outlined in Chapter V are leading to an ever-increasing amount of monopoly, and this tendency seems likely to go on. Monopolistic practices are now so widespread that prices are often not the result of the free interaction of supply and demand, but are artificially raised by restrictions of the supply caused by the monopolies.

Abandonment or Control of the Price System.—Some critics of the price system consider the defects which have just been outlined so serious that they advise its complete abandonment. Such abandonment would

6. Price system does not act to P 256
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mean that production and consumption, instead of being left to the free interplay of supply and demand, would be directed by some authoritative body, such as the state. A commission or board would have to be set up to decide how much of each commodity was to be produced in a given year, and the product would be rationed out among consumers according to what was considered best for their welfare, or most conducive to the interests of the community at large. This is the ultimate ideal of the communists. It also involves the whole problem of economic planning, which has attracted a good deal of public interest in recent years. The questions involved in such a departure from the established order are too broad to be considered in the present chapter. We shall, therefore, leave them for fuller consideration when we take up the subjects of socialism, communism, and economic planning in Part VI of this volume. In the meantime, we must remember that there are elements of economy in our system of prices which would distribute our productive energies wisely, if we could eliminate or control the defects which we have found to be present in it. Would it not be wiser to promote these elements of economy, while taking measures to reduce to a minimum the obstacles which interfere with them?

Try to estimate desire unmet deal later no 6.

The first and third of these obstacles are not inherent in the price system as such. The folly and ignorance of consumers is not due to the fact that they have freedom of choice in spending their incomes. If we could educate consumers to more intelligent habits of spending, their choices would represent a much better guide for production to follow than they now do. We have already outlined, in Chapter III, a program for the improvement of consumption which, if carried out, would go far to accomplish this result. This difficulty, therefore, need not stand in the way of retaining the price system. The inefficiency of producers, likewise, cannot be blamed on the fact that we have prices. In fact, as we have seen, competition among enterprizers for profits, by encouraging them to keep down their costs, tends to correct this very difficulty. This problem can be approached, therefore, along the lines indicated in Chapters IV and V, where it was shown how the development of more efficient management and the closer coördination of industrial processes may greatly improve the technique of production. Such measures will permit the closer adjustment of supply to demand, and economy in the use of our resources, without discarding the price system.

The inequality of incomes which prevents demand from being an accurate register of needs does result from the system of prices itself, for we get our incomes in the form of wages, interest or profits, which are prices set on the services of labor, capital, and management, and derived from the prices of commodities. Nevertheless, the greater injustices of inequality can be corrected without rejection of the price system. Just as an airplane can fly without suspending the operation of the law of gravity, so we can bring about greater equality by studying the laws which govern prices and adapt-

ing our program to them. In Part IV measures by which this may be accomplished will be presented.

It follows, then, that the first three obstacles to the economical operation of the price system are not impossible of remedy. There remain two others —the frictions of industry which prevent the reasonably rapid attainment of equilibrium between supply and demand, and the artificial manipulation of prices by monopolies. If we can secure increased mobility of labor and capital, it will assist in alleviating the first of these difficulties. Something can undoubtedly be done along this line in the case of labor, but there is so much investment in fixed capital in these modern times that it will not be easy to deal with. Both of the last-named obstacles, therefore, may justify some control of the price process thru governmental machinery. Let us consider how such control may be exercized.

B. The Control of Competitive Prices

The World War Price Situation.—The conditions existing during the World War illustrate nicely how supply and demand can get so violently out of adjustment that resort to some form of price fixing may become advisable. A survey of our experience during this period will be instructive

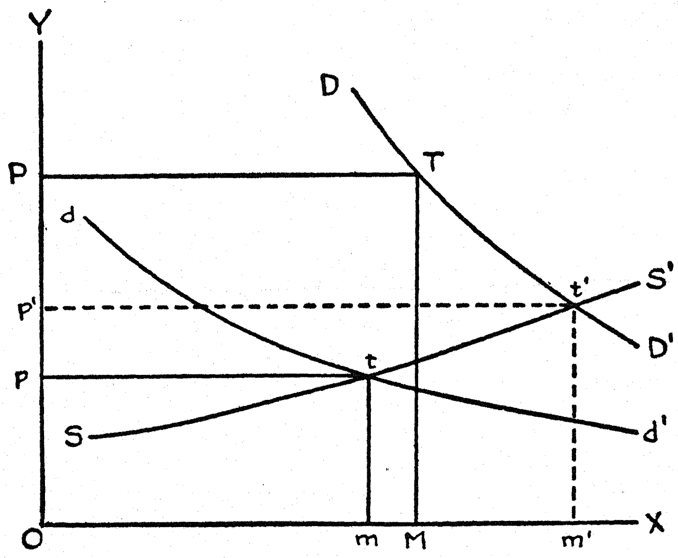

Figure 2. Abnormal Conditions of Demand and Supply in Time of War.

in showing both the possibilities and the limitations to government price control.

When a war breaks out, a sudden increase in the demand for ammunition, warships, uniforms, artillery, and other goods occurs, with which the

supply cannot possibly keep pace. The normal equilibrium of demand and supply is violently upset, and prices rise far above costs of production. The situation may be illustrated by Figure 2. Here it is assumed that the normal, pre-war conditions of demand and supply for some commodity, such as pig-iron, are represented by the curves dd′ and SS′, so that the equilibrium price would be Op, the quantity produced and sold during a given period being Om. The enormous increase in demand occasioned by the war is shown by the curve DD′. This curve is somewhat inelastic, for at such a time the government must have a certain quantity of iron, no matter what the price. If such a demand were to continue for some years, it might be expected that the supply would gradually expand to meet it, at increasing cost, as indicated by the line SS′, until a new equilibrium would finally be reached at the price Op′; the quantity marketed then being Om′. But this adjustment would not take place quickly, and probably would never be reached, because the abnormal war demand would be only temporary. During the war period a very large increase in the output of pig-iron could hardly be expected. Hence the war supply can be represented by OM, which is only slightly larger than the pre-war supply of Om. The result of this is that price is boosted to OP, more than double the pre-war price, and way above the costs of production. This is not a normal equilibrium, and it yields excessive profits to producers, while forcing the government and private consumers to pay extortionate prices. Since this condition prevailed with a large number of commodities, it was regarded as an emergency which justified the government regulation of prices.

Appropriate agencies were accordingly established to fix maximum prices on basic commodities. In the beginning it was intended that they should fix the prices of only a few commodities, and within a limited part of the market, but the interdependence of prices forced an ever-widening extension of the program, so that there is no telling where it would have ceased, had the war emergency continued.

How Prices Were Fixed.—It is obvious that no price-fixing body can successfully establish prices at less than the cost of production of the commodities concerned. To do so would be to prevent their production. Notwithstanding the difficulty of ascertaining the costs, the Federal Trade Commission was able to secure figures from representative manufacturers, checked over by its own accountants, which were sufficiently reliable for the purposes of the emergency. It was found at once that there were great differences in the costs of different producers, except in the case of monopoly. Whose costs were to be adopted for the establishment of maximum prices? To fix the price at the costs of the highest producers would have put a premium upon inefficiency, and would have allowed excessive profits to those manufacturers whose costs were lower, but who would nevertheless continue to

sell at the established price. On the other hand, to take the costs of the latter as the basis for prices would have forced the producers with higher costs out of the market, which would have curtailed the supply of goods. Curtailment of the supply would have been disastrous, because it was a shortage of much-wanted goods that was the very reason for the establishment of price control. Therefore, the practice adopted was to fix a price sufficient to draw out nearly all of the available output, but which did not cover the costs of those few producers on the fringe of industry whose expenses were extraordinarily high. The term *bulk-line producers* was applied to those manufacturers whose output was just necessary to obtain 80 to 90 per cent of the total supply. The costs of these bulk-line producers were the basis upon which maximum prices were established.

It can be seen from these facts that what the price-fixing body achieved was substantially the same as would have been arrived at had normal competitive conditions prevailed. The bulk-line producer is practically the

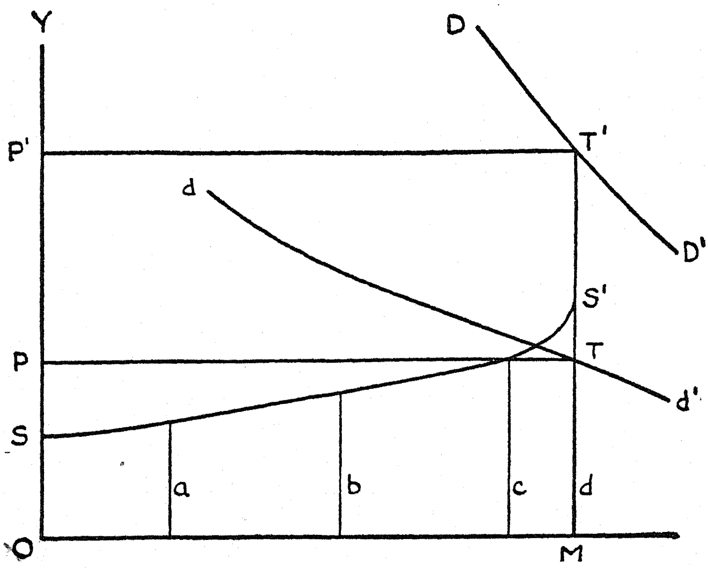

FIGURE 3. The Fixation of Prices at Bulk-line Costs.

same as the marginal producer met with in the economic theory of value. According to that theory, it is the costs of the marginal producers which determine the value of a given commodity over short periods of time. There are always a few producers with higher costs who are just getting established in the industry, or who are in process of elimination by the competitive influences, and who would ordinarily be selling at a loss. In disregarding them, the price-fixing body was doing just what competitive influences normally do in the market. The situation is well illustrated by Figure 3.

sub-marginal

In this diagram it is assumed that competitive prices would ordinarily be fixed at OP, which is just equal to the costs of those producers who are on the margin at c, and above the costs of the more fortunate producers, such as a and b. The producer at c is the marginal, or bulk-line producer. Beyond c are a few extra-marginal producers, such as d, whose costs (MS′) are above the market price, and who will soon be eliminated from the market unless they find means of increasing their efficiency. The abnormal war demand is shown by DD′, which would force the price up to OP′. What the price-fixing bodies sought to do was to hold the price down to OP, where it would have been held by the normal equilibrium of supply and demand in competitive markets. This equilibrium would not have been maintained during the war, however, without the intervention of the government.

The Effects of War-time Price Control.—Because of the depreciation in our currency caused by war-time inflation, the price-fixing authorities were compelled to permit some increases in the prices of the commodities subject to their regulation. Nevertheless, they did succeed in preventing such prices from rising faster than prices in general. This is seen in Figure 4, which presents a comparison of controlled and uncontrolled prices during the war.[1] Here the heavy black line shows an average of the prices of 573 commodities brought under price control at some time during the war. The dotted line represents the average prices of 793 commodities whose prices remained uncontrolled. Control began in the summer of 1917 and was increased thereafter month by month. It will be observed that the commodities subjected to control were those which, previous to 1917, had shown the greatest tendency to rise. After control was begun they fell considerably, while the uncontrolled commodities continued to rise. At the end of the war, the price levels of controlled and uncontrolled prices were approximately the same. This indicates that the price regulation was quite successful.

Attempted Control of the Prices of Agricultural Products in Peace Time.—Maladjustments in the equilibrium of supply and demand may occur in times of peace as well as war. Such maladjustments from time to time have led to agitation for price-fixing legislation. Such proposals, however, have not always been wise. Lack of understanding of economic laws is so general among legislators and the public that they do not always appreciate what are the possibilities and what are the limits of successful price fixing. Hence, measures of price control are proposed which would not be likely to succeed. During the World War the production of wheat and other foodstuffs in this country was greatly increased, under the stimulus of an abnormal European demand which turned to the United States when normal supplies of foreign produce from other countries were

[1] Wesley C. Mitchell, *History of Prices During the War* (1919) p. 47.

cut off by war devastation and blockade. When conditions in Europe improved and the usual sources of supply became available again, there was less demand for the American crops, but the expansion which had been induced by the high prices previously prevailing continued. There resulted a condition of overproduction which led to depressed prices that disastrously affected farmers in the United States. This was accentuated by the depres-

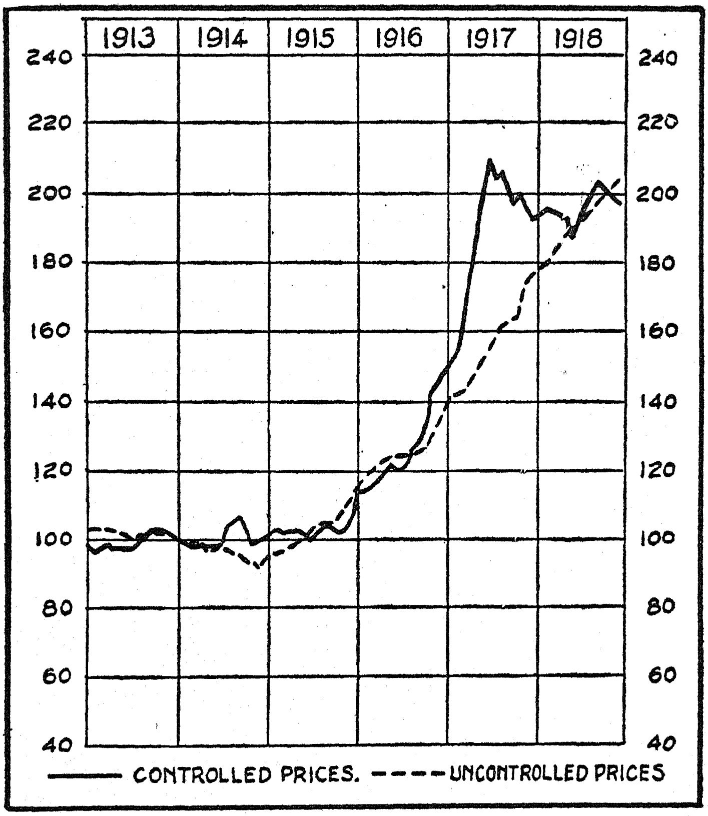

FIGURE 4. The Movement of Controlled and Uncontrolled Prices During the War.

sions of 1921 and 1930-1933, in which farm prices fell faster than those of other commodities. To correct the situation, laws were urged upon Congress intended to raise the prices of grain and live-stock thru the payment of export bounties. The advocates of these measures did not realize that overproduction was the real cause of the difficulty, and that artificially raised prices under such circumstances would only have accentuated the problem by making the overproduction profitable. Legislation later enacted by the Roosevelt Administration sought agricultural price increases thru crop cur-

@ produced more than could be sold at cost of production

But bad if sold on a world market

tailment. A reduction in acreage was secured by the payment of cash subsidies to farmers who restricted their production. We shall give further consideration to some of these programs in Chapter XIX, which deals with "The Plight of Agriculture."

The Control of Rubber and Coffee Prices.—Another good illustration of the problems involved in trying to correct price disturbances resulting from maladjustments in the supply and demand of a commodity is afforded by the British rubber industry. When the growing use of automobiles created a tremendous demand for rubber tires, rubber growing became so profitable that large plantations were started in the British and Dutch East Indies, which soon became the principal source of the world's rubber supply. Too many trees were planted, however, as a result of which the price of rubber, which in 1912 had averaged $1.12 per pound, fell to 17 cents in 1922. With heavy losses confronting its rubber interests, the British government passed legislation designed to raise the price of rubber. The law restricted the exportations of rubber from the British colonies to a certain percentage of the estimated "standard capacity" of the plantations, this percentage varying with the price of rubber in London. The restriction was made effective by a prohibitive tax on all exports in excess of the percentage of capacity established. Since the British then controlled two-thirds of the world's rubber supply, their curtailment of exports succeeded in raising the world price of rubber temporarily. The increased price of rubber, however, stimulated the starting of rubber plantations outside the British Empire. The supply so placed on the market eventually prevented the maintenance of rubber prices above the cost of production, and the British were forced to abandon their scheme. In 1934 an international plan of control along similar lines was effected by a treaty between Great Britain, the Netherlands, France, India, and Siam. The quotas are now fixed by an International Rubber Regulation Committee, instead of by the British alone. It remains to be seen how effective this scheme will be in the long run.

Hoover?

By similar measures the Brazilian government undertook to protect its coffee growers from disastrous fluctuations of coffee prices resulting from variations in weather conditions. To prevent these fluctuations the government required all coffee to be delivered to its warehouses, whence it was released for export only in sufficient quantities to maintain a price regarded as satisfactory. During the early years of the plan it was possible to hold over enough of the surplus crop of good harvests until times of shortage, thereby stabilizing the price from season to season. The monopoly position of Brazil in producing the world's coffee supply led to this apparent success. However, the price was held so high that the same results followed which occurred in the case of British rubber. New coffee trees were planted both within Brazil and elsewhere, so that by 1930 it was necessary to hold so much coffee in storage to maintain the prices established that coffee prices were

finally forced down. This experience casts serious doubts upon the practicability of continuing the coffee valorization plan permanently.

It is to be noted that in both these cases the action of the government was almost equivalent to creating a monopoly. Altho competition between the growers was ostensibly preserved, the policy enforced was much the same as might have been brought about by agreement among the producers.

Some Limits to Price Control.—These experiences with price control, and others which might be cited, suggest some of the possibilities and limitations of price fixation. The case of rubber was one in which an overproduction existed which would not quickly remedy itself, because of the permanent nature of the investment in rubber plantations. The case of coffee was one in which violent price fluctuations were caused by irregular crop yields. The object of regulation in both cases was to correct a temporary maladjustment of demand and supply. The method was to adapt the supply to the demand by artificial means, because the natural adjustment did not work out satisfactorily. Prices were not set directly at all. They were left to the market; but attempts were made to control the supply, and the price was thereby affected indirectly. Where the entire supply can be controlled, intelligent use of such methods ought to work satisfactorily.

The price that regulation should aim to secure is the price that would result of its own accord if there was a perfect adjustment of demand and supply in a competitive market. We have seen that such prices make for economy and efficiency in industry. To fix them otherwise would disturb the economical equilibrium and make for inefficiency. Moreover, such interference with prices would be likely to defeat itself, for it would be difficult to maintain prices that did not preserve a normal equilibrium between the demand and supply. The British manipulation of rubber prices illustrates this truth. There is reason to believe that the control was so exercized as to raise the price above the cost of producing rubber. This is undoubtedly what caused that increase in rubber production outside of British dominions which destroyed the system. Had the price been kept at no more than cost, which is the normal level of competitive markets, this outside competition would not have been invited, and depression of prices below this level might have been permanently avoided.

The impossibility of fixing prices by legal decree, irrespective of conditions of demand and supply, is well shown by the experience of Argentina. Believing that the prices of live-stock were being artificially depressed by the American meat-packers, the Argentine government sought to protect its cattle-raisers by setting up a commission empowered to fix minimum prices upon cattle intended for export. Argentina cannot control the world market for meat, and hence it must sell its cattle at prices governed by the conditions of demand and supply in that market. The fixing of minimum

prices for its cattle made it disadvantageous for foreign buyers to purchase them, and the Argentine growers were unable to dispose of their stock. As a result, the decree was soon suspended.

Similar efforts on the part of Cuba to improve the price of sugar by curtailing its production ended in failure, for the same reasons. Other examples which illustrate the same principles might be cited.

Complications Resulting from Widespread Fixing of Competitive Prices.—The cases we have so far considered, where some interference with competitive prices has seemed to be warranted, have been those where some temporary maladjustment of demand and supply has caused a disastrous condition that does not quickly correct itself. There is a strong presumption against any permanent or more sweeping program of price fixing, *as long as competition is effective.*

We have seen that, except for certain qualifications, the system of competitive prices makes for economy and efficiency. So long as it works smoothly, there is nothing to be gained by disturbing it. If we were to set up a commission or other body, with power to fix prices generally as it deemed wise, it would either be unnecessary, or a nuisance. If it followed the policy of establishing prices at their position of normal equilibrium, it would merely be duplicating what the competitive influences of the market would accomplish without its aid. If it followed any other policy, it would be interfering with the economy of the price system. In the latter case, some prices would be too high, causing demand to be checked and supply to be stimulated, so that overproduction and waste would result; while other prices would be too low, leading to an increase in demand and a shrinkage of supply, which would make it impossible for consumers to satisfy their desires and would force production into channels where there was less demand for it. In view of these considerations, it would appear wise to limit governmental interference to those cases where there is some breakdown in the operation of competitive forces.

There are other difficulties in the way of intelligent price fixing which suggest that it should be used with caution. It would be unreasonable to control the price of any commodity without reference to its costs of production, but the obstacles to the accurate determination of such costs are serious. Costs for each producer, and the methods of accounting employed, are not uniform. In most plants more than one product is manufactured. Here joint costs are to be reckoned with, and it is practically impossible to say what it cost to produce one of the products as distinguished from the others. Costs must include some return to the enterprizers for the capital which they have invested in their businesses, but it is hard to find out just what is their investment, for reasons which will be more fully explained in the following chapter. After the value of the investment has been determined, there still remains the problem of deciding what is a fair

rate of interest to allow upon it. We shall learn more of these intricacies in the following chapter.

A price-fixing body would also have to reckon with the fact that the whole system of prices is interdependent. Each price, to a certain extent, depends upon all the others, and particularly upon the prices of those commodities which are most closely associated with it. A retail price cannot be established without reference to the wholesale and manufacturers' prices for the same commodity; and if the retail price is to be set on a basis of justice, the prices of the materials that went into the product at earlier stages would likewise have to be controlled. Even laborers' wages might have to be established by the commission. As another writer has put it:[2] "When price fixing is once begun, there is no way of stopping it. One cannot thrust the ramrod of maximum prices into the delicate mechanism of industry and commerce in but a few arbitrarily selected places. It is idle to fix prices for a few cereals and tubers, leaving other foodstuffs unregulated. Such procedure opens the way to substitution, and it may lead to total disappearance of the regulated articles from the market. If the price is fixed only for milk, milk may be converted into butter; if the price of butter is also regulated, milk and butter may be converted into cheese, if cheese is added to the list of controlled foods, milk cows may be converted into beef; if the price of beef is also fixed, the farmers may withdraw entirely from dairying and cattle raising; and so on, until the policy, in order to have any chance of success, is extended to all the products as well as to all the processes, the materials and the labor involved in their making."

There is also the question of quality, which could not be left out of account in a price-fixing program. If goods are to be sold at established prices, the price-fixing authority would be compelled to discriminate between goods of different grades, and to see to it that each grade was sold at the price established for it. For instance, if several prices are allowed for different grades of butter, producers of lower quality might evade the maximum set for their butter by representing it as butter of a higher grade. Unless the price-fixing authority is prepared, therefore, to standardize all of the commodities over which its control is exercized, and to provide adequate inspection service to see to it that the standard grades are maintained, its maximum prices would be largely ineffective.

Proposals for government price fixing are often made at a time when unusual shortage of certain commodities has forced their prices to very high figures. Regulation is desired to protect buyers from extortion. If maximum prices are then established for the scarce commodities, more of them will be demanded than if prices had been allowed to go higher; but the price-

[2] S. Litman, *Prices and Price Control in Great Britain and the United States during the World War* (1920), p. 162.

fixing process will have done nothing to increase the supply. In this case the demand cannot be satisfied, and some consumers must go without. The supply is likely to go to those who have most influence, or who offer a bonus to the sellers, thus tempting the latter to evade the law by accepting higher prices than those fixed. The only fair way to handle this situation is to ration the commodity among the consumers, involving a program much more extensive than that of price fixing itself.

While these considerations make it wise to go slowly in extending governmental control over prices, there are reasons to believe that we must prepare for more, rather than less, of such control as time goes on. With the development of "big business," the effectiveness of competition is being gradually weakened, so that it is becoming less reliable as a determiner of prices. Moreover, there are other evidences of weakness in the automatic processes of economic life, such as the growth of unemployment and the apparently increasing severity of business depressions, which are leading to a general extension of state intervention in many directions. We shall have more to say of this tendency in some of our later chapters. Meanwhile, we may consider some of the specific cases in which price regulation is most clearly required.

C. Monopoly and Restrictive Price Policies

The Need for Control of Monopoly Prices.—The discussion of industrial integration in Chapter V called attention to the various ways in which small, competing business enterprizes are being superseded by large organizations more or less monopolistic in character. Where these organizations dominate their respective industries, prices can no longer be left to the free play of market influences. To do so is to leave the consumer defenceless against extortionate price policies. The public is certainly entitled to some protection against such exploitation. Here, then, is one case where price regulation appears to be a necessary remedial measure.

Some measures to protect the public from monopoly extortions have already been taken in this country. There is the Sherman Anti-trust Law and the Clayton Act, whose purpose is to prevent the formation and existence of monopolies. We have also such agencies as the Federal Trade Commission, designed to prevent unfair methods of competition or other evil business practices, including some control over prices. In the following chapter it will be shown that we have gone farther in the case of railroads and other public utilities, their rates being definitely fixed by public commissions, because they are monopolies—a condition which requires that consumers be protected from extortion. The question may well be raised whether we do not need to go further by giving some authority the power to fix the prices of commodities controlled by industrial monopolies. This might be accomplished by extension of the powers of the Federal Trade Commission, or by

some other means. Whatever the agency, it is clear that the growth of monopoly requires more protection for consumers than they now receive.

The Effects of Monopoly Price.—It is not here contended that the effects of monopolistic growth upon prices are always disadvantageous. The economies of large-scale methods introduced by monopolies may greatly reduce the costs of production, and there are cases where monopolies have actually lowered the prices of the commodities whose production they controlled. Under the Standard Oil Trust, for instance, the prices of oils from 1900 to 1916 were not raised as fast as the general level of prices increased, so its products were actually reduced in value by the monopoly. The same thing was true of steel prices under the control of the United States Steel Corporation from 1900 to 1914. The extension of unified management over a wide area and into different markets also makes possible the dovetailing of demands in different localities and the long-time planning of production in such a way as to spread production more evenly thruout the year, and it prevents those sporadic fluctuations in prices which might occur from the more irregular output of competitive conditions. There is some evidence to indicate that a few of our large trusts have actually stabilized the prices of their commodities in this way. Such appears to have been the effect of the United States Steel Corporation on the prices of steel products; and other illustrations of it can readily be found.

But tho monopolies *may* reduce prices and stabilize them, they have the power to keep them high, and are quite likely to use it. Where there is no competition, the consumer must pay whatever prices the monopoly asks, or go without. According to the *law of monopoly price, a monopoly which takes full advantage of its position will fix the price at that figure which yields the highest net returns.* This will be somewhat above the cost of production of its products—how far above depending on the elasticity of the demand and whether the industry is one of increasing, decreasing, or constant costs.[3] Monopolies may be restrained from using their power to the fullest by the fear that high prices may encourage competitors to enter the industry, or that consumers will be driven to the use of substitutes, or that the government will restrain them by hampering legislation; and in these days of improving business ethics they may be led to a policy of moderation by a sense of public duty.

These checks, however, are not likely to prevent the monopoly from taking some advantage of its power to keep up prices. Even in the cases cited, where the prices of oil and steel were reduced, investigations by government agencies indicate that the companies were making exorbitant profits by maintaining their prices at figures considerably in excess of their costs. Students of the monopoly problem, basing their judgments

[3] For a discussion of the relation between these influences and monopoly price see F. W. Taussig, *Principles of Economics*, Vol. I, Chap. XII.

upon the findings of government agencies, have come to the conclusion that the Sugar Trust, the Oil Trust, the Steel Trust, the Tobacco Trust, the Whiskey Trust, and others, kept their prices so high for considerable periods as to yield excessive profits. On the other hand, some other trusts, such as the International Harvester Company, appear to have kept their prices at figures which yield only moderate earnings.[4]

The injurious influence of monopolies upon prices does not consist only in extortionate charges, but there are various other price practices in which they sometimes engage, which are contrary to the public interest and which necessitate some program of correction. They will be described in a later paragraph.

Collusive Price Agreements.—Under the present anti-trust laws combinations in restraint of trade are prohibited, and any agreements between business men fixing the prices at which they shall sell their products are illegal.[5] Where the existence of such agreements can be clearly shown, it is the duty of the authorities to bring prosecutions, and the Federal Trade Commission would have power to prohibit a continuance of the practice; but business men have resorted to a number of devices to evade the law. There may be "gentlemen's agreements" among competitors not to sell at less than certain prices, or at less than prevailing prices, or not to take less than a certain margin of profit, and there are other ingenious schemes, evolved by astute lawyers or cunning business executives, which have the effect of maintaining prices at certain figures while not appearing to do so. Where it can be shown that such agreements are in force and that they do affect prices, the courts will hold them illegal; but it is very difficult to establish the facts in such cases.

Another plan to eliminate price competition has been the organization of "pools," in which the receipts of a number of concerns are paid into a common fund and subsequently divided among them in proportion to their plant capacity, or in some other way previously agreed upon. While such pools are not price agreements, they have the effect of restricting price competition. Under the pooling arrangement it matters not how much business an individual does; he gets only that share of the profits which has been agreed upon in the beginning. Hence he has no incentive to compete in price. These pools are also illegal, and the Federal Trade Commission and other agencies of government will prevent them where possible.

The development of trade associations creates quite a problem for

[4] For details of these cases see J. W. Jenks, *The Trust Problem* (1917), and the shorter summary in Eliot Jones, *The Trust Problem in the United States* (1921), Chap. XI.

[5] However, under the National Industrial Recovery Act, a greater measure of agreement between producers was permitted than heretofore, subject to Presidential approval, and these agreements contained potentialities of price-fixing, altho machinery was provided intended to protect the consumer. While this legislation was avowedly temporary, it may prove to be the beginning of a permanent change of policy.

regulating authorities, for these associations have undoubted benefits, not only for the members of their trade, but for the public at large; yet the coöperative action among the members of the trade which they promote may restrict competition or entirely eliminate it. There may be, for instance, "open price associations," which collect and distribute among their members data showing the prices they are charging for their goods. An investigation by the Federal Trade Commission showed the existence in this country of 150 trade associations disseminating such price information in 1921. The mere interchange of price information is probably lawful, but it can readily be seen that it makes possible abuses, for it might be coupled with understandings or recommendations to the members concerning the prices which they should charge in the future. It is the most natural thing in the world for a trade association to publish price quotations for its commodities, and such information can be of legitimate value for the members of the trade. The regulating authorities have here a delicate problem as to just where it is wise to draw the line. The courts will hold that the distribution of price data is legal so long as no collusive action on the part of the exchangers to make price agreements is apparent.

This discussion does not exhaust the methods by which ostensible competitors may restrict competition among themselves for the maintenance of high prices, but enough illustrations have been given to indicate what the problem is. It is evident that the necessity for some public control of prices is not confined to the giant corporations whose monopolistic influence is clearly revealed, but that it extends into a much broader field of industry where coöperative activity of many kinds among individual business men is found.

Price Discrimination.—In a perfectly competitive market, according to our previous analysis, the law of one price prevails. The one-price system, in fact, is an established part of modern business practice. This is in marked contrast with Oriental countries, where the price at which a sale takes place is a matter of higgling between the merchant and his customer. From the standpoint of fairness, a uniform price to all customers is the thing to be desired, since it assures the same treatment to everyone and thereby allows for equal opportunities in competition. Where competition is really effective the one-price system tends to maintain itself of its own accord, but in case of monopoly there is much greater opportunity for price discrimination among different customers. Since all buyers must come to the monopoly for their goods, it can exact from each the maximum price which he will pay, especially if the transactions are shrouded in sufficient secrecy to prevent each customer from knowing what the others are paying. The policy of price discrimination is advantageous to a monopoly because by this means it can take full advantage of those customers whose demand-prices lie along the upper part of the demand sched-

ule, while at the same time it can get the additional business to be derived by making price inducements to buyers whose demand-prices are low. Consequently, such discrimination has been much resorted to by monopolies. Even competitors may secretly offer special rates to lure especially desirable business away from their rivals. A conspicuous illustration is the practice of rebating, which at one time was a notorious feature of American railroading. Railroads found that they could draw the business of large shippers away from other roads by cutting rates considerably below those which they could afford to offer to the majority of their customers. They, therefore, made agreements to refund secretly part of the freight charges that the favored shippers paid. Railroad rebates are now illegal, and the practice has been almost eliminated in this industry; but in other fields concessions are frequently made to favored customers by quoting them "inside" prices or offering special discounts which are not available to other buyers. The granting of price concessions in favor of important customers who purchase in very large quantities has been a rather general practice in the past. Such discrimination is now definitely limited by the Robinson-Patman Act of 1936, which forbids discounts on quantity purchases which make allowance for anything other than the actual saving involved in the filling of such quantity orders.

Sometimes there is price discrimination between different localities rather than among individual customers. This is particularly likely to be the case where a monopoly is confronted with a competitor in only a part of the territory which it covers. The monopoly can cut its prices sharply in the area served by the competitor, while maintaining its usual schedules in the rest of its territory. Here again is an unfair weapon being utilized to maintain monopoly power at the expense of other business men and the public generally. Under Section 2 of the Clayton Act, all price discriminations between different purchasers in domestic trade are prohibited, where their effect is to restrain competition or to create monopoly. This is a good law, but we must remember that laws in themselves are not effective unless there is machinery for their enforcement. The problem of public administration is to ferret out such cases as these and prevent their existence, a task which is not easy. However, the Federal Trade Commission is a very effective agency for such purposes, and its work is greatly aided by the fact that its activities are usually initiated by the business interests which are discriminated against.

What is here said about discrimination, however, does not mean that no differences in prices between different customers are ever justified. Sometimes different classes of trade occasion real differences in costs to the seller. For instance, it is generally recognized that the sale of goods at retail is more expensive than at wholesale. It would, therefore, be quite proper to charge a somewhat higher price to retail buyers than to whole-

salers for identical merchandize. In railroading, an elaborate system of freight classification has been developing, and is allowed by the courts, partly on the basis of differences in the costs of carrying the different kinds of freight handled. More will be said of this in the next chapter, and again in Chapter XXVI. There are other cases in which different kinds of trade may entail differences in selling costs which would warrant charging different prices to different customers. Of course, where similar goods are dealt in, which differ slightly in quality or grade, the price need not be identical. It is only when price discrimination is used to take advantage of helpless consumers or is employed as a weapon of unfair competition that it is unjustifiable and illegal.

Price Maintenance and Exclusive Contracts.—Another practice quite prevalent in American industry is that of price maintenance. Some manufacturers, protected in part from the competition of substitute merchandize by trade marks and extensive advertizing, fix the prices at which retailers are to sell to consumers, and refuse to sell their products to dealers who cut prices below the established figures. It is argued that this stabilizes the market and protects dealers from the price cutting of ruthless competitors; but the prices fixed are likely to be so high that inefficient retailers are shielded from legitimate competition and consumers are deprived of the lower prices which might be offered by dealers whose efficient management enables them to keep down their costs. Nevertheless, the tendency of legislation is to protect the dealers. State laws legalizing price maintenance have been upheld by the Supreme Court, and the federal Miller-Tydings Act of 1937 specifically sanctioned contracts between the manufacturers of patented or trade-marked goods and retail dealers, in which the retail price of the goods is fixed. Also, by 1938 there were laws in eighteen states to prevent price cutting and the use of "loss leaders," by forbidding the sale of merchandize below cost. However, exclusive contracts, by which manufacturers of standard products bind their dealers not to handle the similar products of competing manufacturers, are illegal. In the past, such contracts have been used to give the manufacturers employing them a monopoly in their trade. Altho the laws in respect to price maintenance prevent some of its most abusive features, it is evident that the interests of consumers have not been sufficiently safeguarded. Changes in the laws to this end are greatly needed.

Delivered Prices and Mill Prices.—There has recently been sharp controversy over the practice, prevailing in certain industries, of quoting delivered prices made up of the mill price at certain manufacturing centers, known as "basing points," plus freight charges to the place of delivery. Under the leadership of the United States Steel Corporation, which dominates the steel industry, there was developed what is known as the

"Pittsburg plus" system of price quotations for rolled steel, a product of extreme importance in building construction, and the manufacture of automobiles and railway equipment. Under this practice purchasers of steel, no matter where located, were compelled to pay the price quoted for steel at Pittsburg, plus the exact freight from that city to their point of delivery, notwithstanding the fact that there might be steel mills nearer to them, the freight from which would be very much lower than from Pittsburg. For instance, Duluth is located not far from Chicago, where there are a number of steel mills. Yet if a customer in Duluth wished to buy steel, he had to pay the Pittsburg price plus freight to Duluth, which is several dollars per ton greater than the freight from Chicago. The steel company, in filling the order, however, could (and often did) make shipment from Chicago, pocketing the saving in the freight which otherwise would have gone to the customer. This involved discrimination against those customers who were located at points distant from Pittsburg and placed them at a disadvantage in competing with other producers at points nearer by. It meant that the same mills were selling at different prices to different producers, for a Chicago mill would sell steel at points close to Pittsburg at a net price (after deducting freight) considerably lower than it would sell to purchasers in or near Chicago. The practice interfered also with the natural geographical division of labor with its attendant economies, for it encouraged the concentration of industries employing steel at points near to Pittsburg, when if there was no price discrimination it might be more economical to locate them elsewhere. A fairer system would be to force the steel mills to quote prices at the mill, allowing the customers to buy where they pleased and pay the freight themselves. Thus every mill would quote only one price to all its customers, and there would be no discrimination. The legality of the basing point system is somewhat uncertain. Apparently the courts will uphold the system if the basing points are sufficiently numerous and scattered. The Pittsburg plus plan was ordered discontinued by the Federal Trade Commission in 1924. A multiple point basing system was set up in its place.

The Federal Trade Commission also attempted to break up the practice, in the Portland cement industry, of quoting uniform delivered prices with freight included to the customer's location. According to this custom all the cement mills sold at the same price in any one town, regardless of the location of their plants. In following this practice a cement plant located at Easton, Pa., might sell its product in Baltimore at the same price quoted by other plants located within a few miles of that city, but in New York the Easton mill would quote a different price, equal to that quoted by other mills located near New York City. Thus the same mill is charging different prices to different customers, but the customers in any one town find only one price

quoted to them by all the mills presumed to be competing for their trade. This practice gives to the mill located at any given city a considerable measure of local monopoly, limited by the freight charges from mills situated at greater distances from its market. It permits a local plant to charge a high price, affording it a substantial profit on its local trade, which it cannot get on its business in other cities. Here again is discrimination, and evidence suggesting the presence of monopoly. Fair practice here, as in the "Pittsburg plus" case, would be for each mill to have a single net price, alike to all of its customers wherever located, permitting the customer to add the freight to his own city. This system, however, was upheld by the Supreme Court. From time to time there has been agitation in Congress for laws requiring goods to be sold at f.o.b. mill prices instead of at the delivered prices, but none have yet been adopted.

Uniform Prices.—The Portland cement and other cases raise the interesting question: Is uniformity of prices quoted by different sellers in the same market an evidence of monopoly or collusive agreement among them, or does it indicate the operation of active competition? Some writers have maintained that it shows the presence of vigorous competition, because, they argue, economic theory teaches that in a competitive market one price and one price only can prevail. It is true that the law of one price is a firmly established economic doctrine, but it is regarded as a tendency which would only be perfectly realized in an ideal market. There is only one *normal price,* but it is not assumed by economic theory that this price actually prevails in the real markets of a dynamic society such as that in which we live. It is only a focal point about which market prices fluctuate. In fact, the very process by which the normal or equilibrium price is supposed to be reached is one of price cutting between competing sellers, who are assumed to be vying with one another in attempting to attract a larger share of the business. Economic theory has always taught that in a dynamic market, conditions of demand and supply are in such a state of constant change that prices are rising and falling, and it has never been held by competent authorities that the prices of all sellers would rise and fall in unison. The machinery of competition requires that some one shall start a reduction or rise in prices and that gradually conditions in the market will force the others to follow. At any one time we must usually expect to find some difference in the quotations of the various dealers or producers of a commodity. If we find, then, that there is no such variation, but that all the supposed competitors are quoting the same prices, there is some presumption that they are acting by agreement and that a virtual monopoly is in existence.

What Is a Fair Price?—The question of what constitutes a fair price is one which will become of more and more significance if the present tendency towards greater government regulation of prices continues.

It is a question which every price-fixing body must answer and which involves some nice issues. From an economic point of view, that price is reasonable and just which promotes the most economical utilization of our productive resources. The analysis of the competitive price system in Part A of this chapter indicates that such economy of production is promoted by the normal prices of competitive markets. Normal prices in such markets are those which bring about an equilibrium between the supply and the demand, at the cost of production of the commodity. In an ideal market these costs are assumed to be those of a representative firm, but in an actual market, it is the costs of the marginal or bulk-line producer which establish the point of equilibrium. A price-fixing body cannot do better than to follow this criterion in establishing fair prices for commodities subject to their control. If there is only one producer to be reckoned with, only his costs need be considered, and the price may fairly be fixed at the figure which will cover those costs, including a fair return upon his investment. Where there are many producers, the point of bulk-line costs can be ascertained, as it was by the Price-Fixing Committee during the World War. This price should be uniform to all customers who buy on the same quantity basis and in the same market, but some difference in charges to wholesale and retail customers should be permitted. Manufacturers' prices should be fixed at the mill or plant, or if quoted at the point of delivery, no more than actual freight charges should be added. It is impossible here to set forth in detail all of the principles which should govern the peculiar details of special cases that would be bound to arise, but if the price-regulating authority follows the practice of seeking to establish those prices which would be maintained in normal competitive markets, it cannot go very far wrong. In this way it will be promoting that natural economy in the disposition of labor and capital which is the object of our economic endeavors. Moreover, this standard appears to be that which is embodied in the popular concept of fair and reasonable prices. Most people think of a price as unfair when it departs from prices which generally prevail for similar articles—that is, from normal competitive prices, or if it involves discrimination—that is, if it violates the law of one price. Thus, popular notions find themselves in harmony with the teaching of science, and the standard of fairness here laid down is supported both by popular judgment and by the weight of reason.

Summary

Specialization and exchange give rise to individual prices (values) whose movements must be distinguished from movements in the general price level. Such prices tend to equate demand and supply where marginal demand coincides with costs of production. Costs stimulate economy in the

use of scarce agents, and the principle of opportunity costs prevents an agent from being employed in any but its most important uses. The economy of the price system is interfered with, however, by five obstacles, *viz.:* demand is not a perfect criterion of need because (1) consumers do not spend their incomes wisely; and (2) their incomes are unequal; costs do not always keep prices at a minimum because (3) men do not produce efficiently; (4) the immobility of labor and capital prevents rapid adjustments of supply to demand; and (5) monopoly artificially raises prices. These defects lead some people to advocate abandonment of the price system, but the first three can be corrected without such abandonment, and governmental regulation can keep prices somewhere near their normal level in cases where demand and supply are badly out of adjustment or where monopoly prevails.

During the World War, when an enormous and inelastic demand existed simultaneously with a temporary shortage of supply, price-fixing bodies were set up which established maximum prices for many commodities on the basis of their bulk-line costs. Inflation of the currency at this time made it impossible to keep these prices from rising, but they were kept below the level which they otherwise would have attained. In time of peace there has been agitation to prevent the depression of agricultural prices arising from excess of supply over the demand. This is illustrated by attempts to control the prices of rubber and coffee by the British and Brazilian governments, respectively. The difficulties of ascertaining costs, the interdependence of prices, and other problems involved in price fixing suggest that such measures should be resorted to only where competition can no longer be relied upon.

Since monopolies can and do charge excessive prices for their products, however, more extensive control of monopoly prices is desirable. Among abusive monopoly price policies are: maintaining high prices by agreements, pools, and open price associations; discrimination in prices, as by rebating; enforcement of set retail prices by manufacturers of trade-marked articles; and the basing point system of quoting uniform delivered prices to various markets, as in the steel and cement industries. Uniform prices charged by different concerns usually indicate monopoly, and not the existence of competition. We need more agencies to maintain fair prices in case of monopolies, a fair price being one that covers the costs of the bulk-line producer.

SUGGESTIONS FOR FURTHER READING

A concise survey of the various aspects of price problems is contained in Chapter XI of L. D. Edie's *Economics: Principles and Problems* (rev. ed., 1932). A short but able discussion of the "State Regulation of Competitive Prices," with particular reference to British war experience, is contained in Chapter XII,

Part D, of A. C. Pigou's *The Economics of Welfare* (1929). A very keen analysis of the American war experience, with emphasis upon both the theoretical and practical aspects, is F. W. Taussig's article *Price Fixing as Seen by a Price Fixer* in the *Quarterly Journal of Economics*, Vol. 33, pp. 205–241 (February, 1919). Indebtedness to this article for some of the material in the present chapter is hereby acknowledged. See also Simon Litman, *Prices and Price Control in Great Britain and the United States During the World War* (1920), and Wesley C. Mitchell, *History of Prices During the War* (1920). In the *Annals of the American Academy* for March, 1929, will be found J. D. Black's survey of *Plans for Raising the Prices of Farm Products.* For a study of foreign international price fixing see B. J. Wallace and L. M. Edminster, *International Control of Raw Materials* (1930).

For a discussion of monopoly prices and of the problem of price regulation in general see Chapters XI and XX of Eliot Jones, *The Trust Problem in the United States* (1921), which has been helpful in preparing this chapter. H. W. Laidler's *Concentration in American Industry* (1931) is an exhaustive study of the monopolies and quasi-monopolies which exist in spite of anti-trust legislation. F. A. Fetter, in *The Masquerade of Monopoly* (1931), gives a searching and well-written study of the growth and policies of American monopolies. *Trusts and Economic Control* (1931), by R. E. Curtis, contains an examination of the legal phases of the problem.

J. E. Dalton's *Sugar, a Case Study of Government Control* (1937) is a good study of attempted price maintenance thru governmental action in this particular industry. J. W. F. Rowe's *Markets and Men* (Cambridge, 1936) surveys artificial control schemes in several primary industries. A good study of the effects and problems of open-pricing is to be found in L. S. Lyon and V. Abramson, *The Economics of Open Price Systems* (1936).

For a discussion of monopoly prices and of the problem of price regulation in general see Chapters XI and XX of Eliot Jones, *The Trust Problem in the United States* (1921), which has been helpful in preparing this chapter. H. W. Laidler's *Concentration in American Industry* (1931) is an exhaustive study of the monopolies and quasi-monopolies which exist in spite of anti-trust legislation. F. A. Fetter, in *The Masquerade of Monopoly* (1931), gives a searching and well-written study of the growth and policies of American monopolies. *Trusts and Economic Control* (1931), by R. E. Curtis, contains an examination of the legal phases of the problem.

CHAPTER XIII

THE REGULATION OF PUBLIC UTILITY RATES

A. Valuation and the Rate of Return

Rate Regulation and Price Fixing.—Altho there is a good deal of legislation designed to prevent some of the abusive price policies described in the last chapter, governments have not yet undertaken definitely to fix the prices which large industrial monopolies may charge for their products. There is one group of industries, however, known as *public utilities,* whose monopoly position is so secure, and which controls necessities so important to the people, that their prices have long been subject to regulation by the public authorities. Chief among them are railroads, street railways, telephones, telegraphs, waterworks, gasworks and electric power plants. Since the output of these industries constitutes well over 10 per cent of our national income, it will be realized that the extension of price fixing into this field represents a substantial departure from the open-market pricing process. The corporations which operate in these industries are known as *public service corporations.* Regulation of them has quite generally been intrusted to semi-judicial administrative bodies, known as *public utilities commissions.*[1]

The public service corporations usually possess a complete monopoly of their respective businesses within the territory which they serve; and it is quite desirable that they should, for a community can usually be served more economically and efficiently by one system of street railways, one telephone line, or one water supply, than by two or more. But the existence of monopoly frees such corporations from the competitive price-making influences, and if they were not restrained, they would be in a position to exploit the public by making exorbitant charges for their services. Hence, the problem which confronts the regulating authorities is essentially one of monopoly price, the principal features of which have already been discussed in the preceding chapter. For that reason, this chapter may be considered an extension and elaboration of its predecessor. Rate regulation is singled out for separate treatment only because it has been more fully elaborated in our economic institutions than the forms

[1] The general nature of these commissions, and the broad powers of regulation which have been intrusted to them, will be described in Chap. XXVI. We are here concerned only with the problem of rate regulation, which rests in their hands.

of price fixing which have already been considered. It will be noted that the goods supplied by public utilities consist in many cases of intangible services, such as the transportation of merchandize or the provision of telephone facilities, rather than material commodities—altho water and gas fall strictly within the latter category. Perhaps because of the non-material character of these products, their prices have come to be known as *rates*. Nevertheless, rate regulation is essentially a process of price fixing, very similar in its nature to the pricing of commodities.

The Basis of Rate Regulation.—Such being the case, the general principles of price fixing which were laid down in the previous chapter apply to the regulation of public utility rates. According to our earlier analysis, it is expedient and equitable that prices should be fixed at that figure which would prevail in a competitive market. Such prices are equal to the costs of producing the commodity or service concerned. It is the duty of the regulating authorities, therefore, to fix the rates at such a figure as will just cover the costs. In the case of public utilities, however, this involves many complexities which we shall have to consider as we go on. In general, it may be said that the commissions have recognized costs of production as the proper basis for the establishment of rates, and this principle has been sustained by the courts. The problem is to find out just what are the costs in any given case.

The costs of producing any good can usually be divided into two general groups. First, there are the monetary outlays which enterprizers must actually make in the conduct of their businesses. These will include payments for material, wages, repairs and maintenance, some allowance for depreciation, and the payment of certain taxes and insurance premiums, with possibly other items. Second, economics teaches us that there must also be an allowance to the enterprizers for the capital which they have invested, for their labor of supervision, and for the risks which they run. In other words, there is a certain profit, consisting mainly of interest and wages of management, which is properly regarded as a cost of production. This is well recognized in the law and practice of rate regulation. It has been held by our courts that, under the due process clause of the Constitution, the regulating authorities must not confiscate the property of public utilities. They must fix returns at such a figure as will yield to the company a "fair return" upon the "fair value" of its property "used and useful in the public service." This "fair return" is the reward to the enterprizer for his capital, risks, and management.

Ascertainment of the actual outlays for material, labor, and so on, does not present a difficult problem. These payments are a matter of record, and by exercizing some supervision of the company's accounts their amount can be found with reasonable accuracy; but the return to management does not constitute an outlay, the amount of which is fixed

by market prices, and it is therefore a matter for judgment, which presents difficult questions of equity and expedience. In current practice this return is computed, like interest, as a percentage of the value of the capital which the enterprizer has invested. No separation is made between interest, wages of management, and reward for risk, but a gross rate of profit is sought which will provide adequate compensation for these three elements. This involves two problems: What is a fair rate of return for these items; and what is the value of the investment to which this rate is to be applied? The latter question involves the difficult task of valuing the property of the corporation to be regulated, a task both intricate and technical. We shall consider this first, before entering into a discussion of the fair return.

Capital Stock and Market Value as Bases for Valuation.—At first thought, one might suppose that the par value of the capital stock could be taken as the value of the property, since each share is nominally an evidence of the stockholder's financial interest in the company. To this, however, there are a number of objections. To begin with, the stock of many corporations nowadays has no par value. Where it has one, the corporation may be overcapitalized, in which case the par value of the stock would be considerably in excess of the actual value. To base the return upon such a valuation would be to give the company excessive profits at the expense of the consuming public. It is notorious that in the history of public service corporations there has been much stock-watering, which has led in many cases to gross overcapitalization. This practice (flagrant cases of which still occur from time to time) precludes taking the present capitalization as the basis for rate regulation. Moreover, even where there has been no overcapitalization, bad management may have caused the loss of some of the assets or the depreciation of the plant of the company, so that the capitalization no longer represents the value of the property. It would clearly be unjust to force private consumers to pay returns on property which the corporation had lost by its own mismanagement in the past. On the other hand, there may be appreciation, not reflected in the nominal value of the outstanding shares, on which the company is entitled to some return. Capitalization, therefore, must be entirely rejected as the basis for valuation.

If we take the market value of the company's property instead of its capitalization, we have an equally unsatisfactory criterion of value. The market value might readily be determined by finding the price at which its securities are selling in the stock market, but to take this as the basis on which to establish rates would involve us in a vicious circle. The market value of any investment is based upon the return which the purchaser expects to derive from it. Market value, therefore, is based upon a capitalization of the present and prospective earnings of the company, at the current rate of interest. If a rate is fixed such as to allow a reasonable

return on such a value, it will usually be as high as the rates already prevailing. Let us suppose that a gas monopoly, whose plant would actually cost $100,000 to build, can get $20,000 of profits annually by charging extortionate prices,—a return of 20 per cent. Assuming that 10 per cent is a normal return to enterprizers for capital and management in such industries, it appears that this company is making double the profits to which it is fairly entitled. Its securities, other things remaining equal, will sell for about double the cost of the plant, or $200,000. Suppose now that the regulating authority sets out to establish a fair rate for this corporation, and decides to allow it 10 per cent on its market value of $200,000. It will have to establish rates at exactly the level at which they now are, for no lower figure will provide a fair return upon such a value. Market value, therefore, fails to protect the consumers. Some other basis for rate regulation must be found.

Original Cost (Prudent Investment) as the Basis for Valuation.—A much used method of ascertaining fair value, which is urged by many authorities as the only satisfactory solution to the problem, is to take the original cost of the plant to date, including the cost of additions and improvements since the time of first construction.[2] This would give the actual investment of the stockholders in the business. Such a basis for valuation has undoubted merits. On the surface it seems fair to the company, for it would allow them a reasonable return on every dollar actually invested in the property "used and useful for the public service." It also seems fair to the consumer, for it avoids the danger of inflated values inherent in the capitalization and market value methods. Moreover, it has the advantage of giving a definite value once and for all, which will not change from year to year, but will remain stable. With such a valuation established, the companies will know just where they stand and what they can expect, and the regulating commissions will have a definite principle on which to work.

On the other hand, the original or historical cost method of valuation has certain drawbacks. In the first place, it is often difficult, if not impossible, to ascertain what the actual investment of the stockholders in the property of a public service corporation is. If the company has been in existence a long time, the original records concerning plant construction, prices paid for materials, and so on, may have been lost. As a matter of fact, in most cases no permanent records of this sort were ever kept. This is a real obstacle to the original cost method of valuation in the case of those companies which have been long established. As a basis for future policy, however, it would be more readily workable, for business records of this sort are now more carefully kept than they used to be, and the companies

[2] If the plant has been allowed to depreciate, the amount of such depreciation is usually deducted. This is more fully explained below.

could be required to keep them henceforth. If this difficulty is surmounted, there remains the problem of deciding what shall be included as legitimate costs in computing the actual investment. Shall anything be allowed to the company for such intangible values as development expense, franchise, good will, and the like? We shall discuss this question further in a later paragraph. Then there is the possibility that the costs of the company may be made to appear greater than they really were. It is notorious that, where prices are fixed on the basis of cost plus a certain percentage as profit to the contractor, an incentive is placed upon him to make his costs as high as possible, thereby encouraging extravagance and waste. Cases are on record where companies, seeking to obtain as high a valuation as possible, have padded their accounts with all sorts of fictitious costs. We had unfortunate experience with this type of contract in construction projects during the World War. The principle which must be followed here is to allow only the actual investment "honestly and prudently made" by the company, which management. So interpreted, the method of original cost becomes the method of *prudent investment;* but it is a nice matter to decide in every case what constitutes honesty and prudence.

Original cost or prudent investment ignores any changes in the price level which may have taken place since the construction of the company's plant. This may be unfair to the company or to the consumers, depending on which way the prices have moved. If the price level has risen, the value of the dollar has declined, and it is not fair to the company to value its property and its income in terms of dollars which do not represent as much real goods as did the dollars which they originally invested. To do so means that in periods of rising prices the real income of the stockholders is being decreased by the regulating authority. If the price level is falling, the corporation is allowed the same money income as before, but since this will buy more goods, the real income is actually increasing, at the expense of its patrons. Changing price levels also would mean that the original cost method will result in discrimination between the consumers of different utilities. Consumers served by companies whose plants were constructed in periods of high prices will be paying high rates, while those served by companies whose plants were constructed in periods of low prices will be paying low rates. This is a serious defect of the original cost principle, but one which will become negligible if we ever reach that point of efficiency in our economic institutions where we have a monetary medium of stable purchasing power.

Finally, the method of original cost or prudent investment, if rigidly held to, involves injustice to those who have bought stock at inflated values, in good faith, before the advent of rate regulation. Suppose that the value of a company's shares prior to the regulation régime had risen to high figures

as a result of high earnings, and that much of the original stock had changed hands, so that it is now held by purchasers who bought it at the time of its maximum value. If the regulating authority now says that it shall be permitted to earn no more than a fair return on the original investment, it is depriving these stockholders of a portion of their savings. Also where companies have gone thru successive reorganizations and consolidations (as has frequently been the case with public utilities), the probabilities are that the present company will have acquired the plant of its predecessors at high prices which were paid to induce former competitors to come into the organization. These prices may be far in excess of the original cost of construction of the plants so acquired. In computing the actual investment of the present corporation, shall the price actually paid for the acquisition of these properties be allowed, or only the cost of construction of the plants that were purchased? Here again is a problem of vested interests which is difficult to answer with fairness to present investors and at the same time to consumers.

Notwithstanding these difficulties, a trend toward reliance upon prudent investment as the preferred basis for valuation of public utility properties is apparent, both in the decisions of the public utilities commissions and in the opinions of students of the problem. This leaning is due to the advantages of definiteness and stability which are characteristic of this method. It is also argued that, since the government protects the investors in their monopoly position, this offsets some of the injustices above referred to. There is another factor which has probably been of weight in persuading the authorities to favor this method. It happens that the extension of rate regulation took place during a period when prices were rapidly rising and when, consequently, property values were rising also. Hence original cost would give a lower valuation than other methods based upon present prices (such as the reproduction cost method next to be discussed), thereby preventing the companies from making extortionate profits. In recent years, however, prices have been falling, and the method of original cost, for companies whose plants were constructed during the period of high prices, will give higher valuations than would a method based upon the present price level. If we were to embark on a long period of slowly falling prices, it is entirely possible that the present popularity of original cost as a basis of valuation would wane and come to be regarded as too favorable to the companies.

Reproduction Cost as the Basis for Valuation.—Another basis for valuation which has been strongly advocated is to take the present cost of reproducing the company's plant. This method has the merit of giving results more nearly in accord with those which would be arrived at in a régime of competitive prices than any other which has been proposed. As the object of rate regulation should be to establish prices equal to those

that would be reached in competitive markets, it has much to commend it. According to the theory of values, prices tend to settle at the cost of production; but this cost is a prospective and not a retrospective one. It is recognized by leading economists that the past costs of producing a commodity have no effect upon its value, once the article has been placed upon the market. The operations of producers are governed by the return which they think they can get in the future on what they anticipate will be their costs at that time. The present return on the past costs affects the market only by giving to producers a basis in experience to help them in determining their future policy. In short, the influence of costs upon values is forward-looking, not backward-looking. If this fact had been made more clear in the prevailing economics text-books than it usually has been, the method of reproduction cost for determining fair value in the case of public service corporations might have attained more popularity in the eyes of impartial critics than has hitherto been accorded it. As it is, the reproduction cost theory has been defended mainly by the companies whose properties were to be valued, because in a period of rising prices it has meant a higher valuation for them than would the method of original cost. But if the reasoning of the foregoing paragraph is correct, falling prices would cause the companies to rely less and the defenders of the public to rely more upon reproduction cost, because when prices are falling this method leads to lower valuations.

Opponents of the method contend that the rise in values which the companies would derive from it when prices are going up is unearned by them and unjust to the public, while the fall in values which they would suffer when prices go down would be equally undeserved. This ignores the fact, however, that dollars vary in purchasing power, and that it is unfortunate to fix anyone's income in dollars, for this is equivalent to forcing their real income downward when the dollar's value shrinks and upward when it expands. If real equity to the utilities and to the public is sought, the effort should be made to stabilize the return in real income, and this would be more nearly achieved by reproduction than by original cost. Moreover, this is more nearly in accord with the conditions that would be reached in a competitive market; and it is sound economy to fix prices on the basis of present rather than past values, since only in this way will the best apportionment of our present resources among the various present demands be secured.

It must be admitted, however, that the application of the reproduction cost principle presents as many difficulties as does the actual investment principle. The same question as to what shall be done with the intangible values arises here as in the former case. How much would it cost now to obtain a franchise, or to build up the company's good will? Then, it must be decided whether the reproduction cost shall be that of a plant

identical with the one which is being valued, or that of a substitute plant representing the best of construction and methods of manufacture capable of rendering the same service. Often, were the plant to be reproduced it would be built entirely differently, and the general plant and equipment would be such as to permit of much more economical operation than the plant which is now in use. Hence, the cost of a substitute plant would yield lower valuation than that of the present one. Again, should reproduction cost be considered in the light of all the historical conditions which were encountered in constructing the present property, or should only the present conditions of construction be taken into consideration? If reproduction cost under historical conditions be allowed, one would have to ascertain all of the steps in the original construction, the difficulties that were encountered, and so on, and compute the expense of reproducing this development today. On the other hand, if reproduction cost under present conditions is adopted, the entire process might be very different, with a resulting difference in the valuation. Finally, should reproduction cost be ascertained at present or at historical prices? If historical prices (that is, the prices which actually prevailed at the time the original plant was constructed) be taken along with the historical conditions of construction, the valuation arrived at will, of course, be exactly equal to the original investment. Thus historical reproduction cost with historical prices is practically the same as original cost. Economic theory lends support to the view that the reproduction cost which should be taken as the basis for valuation is that of a substitute plant constructed under present conditions and at present prices, for, according to the argument presented above, this is the cost towards which competitive prices would tend.

Unfortunately, however, such a basis of valuation lacks the definiteness which both the regulating authorities and the companies that are regulated very naturally desire. What it would cost to erect a plant at present prices, and what would be the best substitute plant to turn out an equivalent product, are matters for conjecture, on which there is room for much disagreement. Probably no two estimates of value on this basis would be alike. This is a serious practical difficulty which stands in the way of its adoption. There is also much opposition to it because of its instability. If it is taken as the basis, the value of a company's property will fluctuate with changes in prices and costs, as well as with the technical advance of the industry. Against the last objection it may be argued that we live in a dynamic society in which it is hopeless to achieve perfect stability; nevertheless, it may be that the greater definiteness and permanence of a valuation once made on the original cost principle presents practical advantages which offset the theoretical superiority of reproduction cost.

There is one other consideration which should not be overlooked. It is that the reproduction cost method is more likely to stimulate good manage-

ment than the actual investment method. It would tend to induce investors to concentrate the construction of public utility plants in periods of low prices, in order that they might avoid the deflation in the value of their property which would come from later falling prices if they built at a time when prices were high. The original cost principle has the opposite effect, encouraging construction at periods of maximum prices in order to reach a valuation as high as possible. Furthermore, if the public service companies knew that the value of their property would be based on the costs of erecting a substitute plant, there would be an incentive for them to keep their own plant always at the maximum of efficiency and to introduce into it the most improved methods and devices as fast as they were developed.

Allowances for Intangible Values.—Under either the reproduction or the historical cost methods a problem of intangible values will be met with. Not all of the property of a corporation is embodied in such physical forms as buildings, machinery, or equipment, which can be readily discovered and priced with at least some degree of definiteness. The companies rightly urge that the development of a business, the securing of franchises, and so on, represent intangible capital which is just as essential and valuable in the conduct of its business as is the material plant. A going concern has effected an organization and established business connections which are essential to the conduct of any business enterprize, and the development of which would involve a cost to any other company that tried to start anew in the field. Public service corporations should be entitled to a return upon their investment in these intangible assets. They also claim that they should be compensated by higher profits now for the losses sustained in the lean years during which their plant was not fully utilized and they were developing patronage. Sound policy in this respect would appear to be to allow in the valuation of the company's product any items of actual cost (or of estimated reproduction cost) honestly and prudently expended for developmental expense or the securing of franchises. When the companies claim that an allowance should be made in the valuation for monopoly value embodied in an exclusive franchise, or for such things as good will, however, their position is unsound. These are only market values masquerading under a disguise. They represent the capitalization of earnings in excess of a fair return upon a fair value, and if the capitalization of such a return is included in the valuation, it is easy to fall into that vicious circle, the fallacy of which has already been exposed.

The Treatment of Depreciation.—In computing the value of a company's property, under either the original or reproduction cost methods, the problem of how to handle depreciation will arise. In the course of its business the company's plant must suffer more or less depreciation, either thru the deterioration of its physical equipment or thru its having become obsolete or inadequate for the service it has to perform. It is generally con-

ceded that the company should be allowed a rate of return sufficient to permit it to lay aside out of present income a reserve to meet future depreciation, so that the equipment can be replaced when it becomes necessary to discard it. Such depreciation allowance is regarded in economic theory as one of the costs of production entering into the determination of prices.

Likewise, if due provision for depreciation has been made in the past by reserve funds invested in assets now in the company's possession, these funds should be included in the fair value of the property. Sometimes, however, depreciation funds once accumulated have subsequently been paid out in dividends or lost through unwise investment. Sometimes, too, past management has neglected to provide for depreciation. Most authorities hold that in such cases the amount of the depreciation should be deducted from the original or reproduction cost value of the plant, arguing that the company is not entitled to a return on any more property than it actually has. By our reasoning, this view is incorrect, for it might lead to rates which are below the normal price of the service. That price is equal to what it would cost to produce the service today with an efficient modern plant. Failure of a company to have made provision for depreciation brings its own penalty, in high present costs due to inefficient equipment, and in lack of funds with which to make replacements, without the added punishment of having to accept less than normal prices for its product. However, if depreciation has reached the point where the service is impaired because of it, it would be reasonable to require a reduction in the rates on that account.

The actual computation of depreciation allowances involves controversial technical and accounting difficulties, into which we shall not enter.

Progress in Valuation Policy.—The development of valuation practice has of necessity been subject very largely to the dictates of the courts. Unfortunately, the legal decisions as to what shall be the basis of valuation have been both vague and confused, so that no clear principles emerge from them. At one time or another the courts have ruled that both original and reproduction costs, not to mention such factors as market value, going concern value, and other questionable items, must be considered. Hence, most of the decisions of courts and commissions on valuation matters have been compromizes. The commissions, having been in closer touch with the problem and more conversant with its technical phases, have generally shown more consistency and definiteness than the courts. Progress in a matter of this kind cannot be made on the basis of legal precedents. The commissions are much more free to be guided by the advice of economic experts, and the courts show an encouraging tendency to allow the commissions to work out the problem in their own way.

It is easier to apply sound principles of valuation to new investments.

made by companies since the advent of regulation, than it is to those which have existed for a long time. In earlier days, when monopolies were subject to little regulation, consolidations (and overcapitalization attendant thereon) could be made freely and securities could be sold to innocent investors at values inflated by capitalizing the high rate of earnings prevailing. In such cases these vested interests must be considered in valuation, and this prevents the rigorous adoption of either original cost or reproduction cost methods. Investments now or in the future, however, take place with knowledge on the part of the investors that excessive earnings are not to be permitted in the future. Hence, a rigorously sound valuation policy can be applied to them. Thus in the future some of the difficult problems that now confront the regulating authorities will disappear.

The Rate of Return.—When the fair value of a public utility's property has once been arrived at, the regulating commission must decide what rate of return on this value is to be permitted. Here again we should be guided by the theory of competitive prices. Standards derived from that theory should be established. The problem is by no means simple, and it involves some nice questions, second in difficulty only to those of valuation itself.

According to the principles of economics, the return derived by an enterprizer from his investment consists of interest, wages of management, and pure profits, constituting a return to the investor for his capital and his labor, with a residual element (positive or negative in character) arising out of the uncertainties of industry and constituting, in part, a reward for the risks of his business. It is not necessary for the rate-regulating authorities to split their conception of fair return into these elements, but it is clear that if justice is to be done to the corporation, something corresponding to these three elements of gross profits must be permitted. This means that the "fair return" to be allowed on the "fair value" must be sufficiently higher than pure interest to include some recompense for the other elements. In other words, it is incumbent upon the regulating commission to arrive at a rate of gross profit which, in its judgment, provides adequate compensation for investment and management. The amount of this profit should vary with the risk and uncertainty of the business and with the efficiency of the management. It is important that some attention should be paid to the quality of the management. If the same rate is allowed to all companies, regardless of whether their management is good or bad, there is no incentive to efficiency. It is important, therefore, for the regulating commission to appraise the management of the companies subject to its control and to permit sufficient rewards to good management to give the needed encouragement to efficiency.

Having due regard for these considerations, the commission can be guided in determining what rate is fair by studying the earnings of other

enterprizes, similar in nature but not subject to regulation. A good indication of whether the rate allowed is adequate is furnished by the market prices of the company's securities. If, under the rates set by the commission, its shares of stock are selling at or above the fair value of its property, there is reason to believe that the return is adequate. If, on the other hand, the securities are below the level of similar securities in other industries, the probability is that the rate is too low and should be increased.

Some critics of rate-regulation policy have expressed the belief that, in their zeal to protect the public from extortion, the authorities have cut the rates of public utilities too low to be fair to the companies. The difficulties which the railroads experienced in obtaining sufficient capital to make needed extensions of equipment during the period just prior to the World War and after it have been cited in proof of this. The railroads contributed to these difficulties, however, by their own mismanagement. It is true that rates which are fixed by public authority are likely to lack flexibility, for the process of securing changes in rates is slow, and the commissions are naturally conservative. Hence, during a period of rising prices there may be a tendency not to permit the companies to raise their charges as rapidly as circumstances warrant. On the other hand, when prices fall, a decline in the rates may be delayed too long. On the whole, however, it does not appear that regulation has injured the public service corporations. Viewing the industries in the large, they continue to increase in numbers, and their securities sell at prices which indicate that they are not lacking in prosperity. In the last analysis, the maintenance of a fair rate of return is a question of expediency. It is important that the rate should be high enough to attract capital into the regulated fields; otherwise the public will not be adequately served. It is important also that the public shall be protected from the exorbitant charges of a monopoly. These, then, are the criteria of sound regulation practice; and, in general, it may be said that the tendency is for public utilities commissions to adhere to them.

Reference should be made to the London sliding scale, which is a device recently quite popular in England, which does away with the inelasticity of regulated prices. Under this plan, in the case of a gas company, for instance, every time the management succeeds in reducing the costs of producing gas the saving is shared between the company and the consumer. That is, there is a reduction in rates to the consumer, but not so great as to absorb all of the decrease in costs. Thus, the company increases its profits by its efficiency, and the consumer enjoys a portion of the advantages. This stimulates efficiency of management by rewarding it liberally for its every improvement. A greater use of this system in America might be desirable.

Some Obstacles to the Fixing of Fair Rates.—Enough has been said to show that the fixing of the fair value on which rates are to be com-

puted, and of the rate of return itself, are largely matters of judgment and conjecture. There is much room for difference of opinion, and both commissions and experts may disagree widely, according to whether their bias is in the direction of high rates, favorable to the companies, or low ones, favorable to consumers. This is well illustrated by the following table, which shows the estimates for fair value and fair return for the New York Telephone Company made in a recent case:[3]

Source of Estimate	*Fair Value*	*Rate*	*Fair Return*
Majority of Public Service Commission.....	$366,915,493	7%	$25,635,000
Federal Statutory Court	397,207,925	7%	27,635,000
Minority of Public Service Commission......	405,502,993	8%	32,480,000
Special Master's Report	518,109,584	8%	41,448,777
Co.'s claim based on Whittemore appraisal..	528,753,738	8%	42,300,299
Co.'s claim based on Stone & Webster......	615,000,000	8%	49,200,000

The problem is also complicated by the institution of holding companies. Often a hierarchy of such companies exists, so that a small clique in control of the dominating company can control the destiny of great amounts of capital invested in many corporations. In such cases, it is possible for the "insiders" so to operate the subsidiary companies as to make it appear that they are operating at a loss, or at a very small profit.[4] This cheats investors in the subsidiaries of their just earnings, while making excessive profits for those who own the holding companies, and at the same time it provides a basis for a claim that the underlying companies are in need of higher rates. Where these intricate corporate relationships extend over more than one state (as they frequently do) it is difficult for state public-utilities commissions to deal with them, and in any case it is difficult to untangle the financial maze that has been created. There is urgent need, therefore, for more stringent laws, preferably by the federal government, regulating the operations, and especially the accounts of holding companies in the United States.

B. The Fixing of Specific Rates

Specific Rates and the General Level of Rates.—The establishment of a fair return on the fair value of a company's property merely fixes what the general level of rates for its service shall be. It establishes a criterion for its rate schedule as a whole, but this in itself does not necessarily determine the rates in detail. It is rather the regulation of profits than of specific charges. Many public service corporations produce more than one commodity, and practically all of them have different classes of customers to serve.

[3] *The State Abdicates*, in *Proceedings of the Academy of Political Science*, Vol. XIV, pp. 61–62; cited by C. M. Clay, in *Regulation of Public Utilities* (1932), p. 47.

[4] The growth of holding companies has been described in Chapter V.

The railroads transport both freight and passengers. Water is supplied both for fire protection in street hydrants and for household use. Gas is furnished as industrial fuel and for domestic cooking and heating. The determination of the prices to be charged, therefore, is not simply a matter of ascertaining the cost (including a fair return) of producing a uniform commodity, and then establishing a flat rate to all users which will just cover that cost. It is necessary to set up a schedule of rates for the different products and the different classes of consumers which will utilize the facilities of the company to their fullest and not yield in the aggregate more than the fair rate of return which has been decided upon. This involves intricate and technical questions, an adequate discussion of which cannot be attempted here. We can barely sketch some of the broader aspects of the problem and the general principles which apply thereto.

Fixed (Overhead) and Variable (Operating) Costs.—Two kinds of costs usually confront the public utility management. There are the fixed or overhead costs, such as insurance, interest on bonds, certain administrative expenses, allowances for depreciation, and the like, the amount of which is fairly uniform, regardless of fluctuations in the sales of the product. For example, a railroad company has stations, terminals, and a certain number of miles of track to maintain, interest (if bonds are outstanding) and insurance on which must be paid, and depreciation allowed for, regardless of the quantity of passengers or freight transported. On the other hand, there are variable or operating costs, such as labor and materials, which will increase or decrease with the amount of business transacted. The number of trainmen employed, the number of locomotives and cars operated, and the quantity of coal consumed in running the railroad will fluctuate upward and downward with the amount of traffic. It is characteristic of the public utilities that the proportion of fixed to variable charges is exceptionally large, due to the huge plant which is necessary to the maintenance of their businesses. Their equipment does not consist merely of a single factory located on a small piece of land, but includes facilities such as track, telephone or telegraph wires and poles, or gas or water mains, reaching thru miles of streets and covering an enormous territory.

Where several different products are furnished by the company, or several different classes of consumers are served, it is impossible accurately to allocate these fixed costs among them; and sometimes this is true partly of operating costs also. All such costs are joint; that is, they are incurred jointly for all of the business transacted by the company and cannot be attributed specifically to this or that item of the service. In such a case we must fall back upon the economic theory of joint costs to give us standards for the establishment of proper rates. According to this theory, wherever there are specific costs which can be separately allocated to corresponding products, the commodity or service to which they apply must yield a price at least

high enough to cover the expenses associated with it. If it failed to do so it would clearly be supplied at a loss, which could be avoided by discontinuing its production and saving the costs which its manufacture occasioned. The joint (fixed) costs, however, must be apportioned among the various products or classes of customers in accordance with the relative demands for them. In this way each product or class of service pays the costs directly attributable to it, and whatever proportion of the general overhead costs the demand for it justifies, the aggregate return from all the products combined being sufficient to cover the total costs, both fixed and variable.

This principle necessarily involves discrimination between different customers, forcing some of them to pay more for the commodities or services they get than do others; but this is expedient and just, for it makes for maximum economy in the plant's operation. For example, a telephone company is confronted with the fact that its facilities are wanted mostly in the day time, and particularly during the business hours. In the evening and during the night its plant is almost idle. If it can take on additional business during this period, no increase in the overhead expenses will be thereby occasioned. If it could secure such business at any price which would more than cover the extra operating costs, it would be profitable for it to do so. Hence, it can economically handle night service at a lower rate than would be possible in the day time, and by this low rate encourage the additional use of its facilities. Were it to charge this same low rate for its day service, the income would not be sufficient to cover the overhead costs. Were it to charge as much for the night as for the day service, the night facilities would be less utilized. By discriminating in favor of night calls it obtains additional business which reduces the overhead burden upon the day calls, and actually makes possible lower rates for the latter than would have to be charged if the discrimination in favor of the night service was abandoned.

The "Cost of Service" and "Value of Service" Principles.—The foregoing analysis indicates that to some extent prices should be based upon costs of production, but that where costs cannot be definitely allocated, rates must be based upon demand. Both these principles have commonly been recognized in rate-making practice, where they are known as the "cost of service" and the "value of service" principles, respectively. Both the commissions and the courts lean strongly to the policy of fixing rates at what it costs the utility to supply the service in question, wherever that is possible; but they have been compelled in many cases (somewhat reluctantly, it would seem) to permit some consideration of the value of service—or, as it is sometimes put, "what the traffic will bear." That is, where costs could not be clearly allocated, they have recognized that the utility is justified in apportioning its charges to some degree upon the demand for the service, or what could be exacted from the consumers. Neither the courts nor the com-

missions, however, have clearly adopted the principle of economic theory, that each item should bear all of the costs separately allocable to it and that the overhead costs should be apportioned entirely on the basis of relative demands for the different services. Rather there has been a tendency, whereever possible, to allocate the overhead on some arbitrary or artificial basis. A study of the decisions reveals that there has been much compromize and inconsistency in these matters. Occasionally still other factors have been given weight in deciding on questions of specific rates. For example, especially low railroad rates to school children have been upheld because they were conducive to the public welfare, and in other cases the existence of sharp competition has been held to justify the charging of unusually low prices by a public service corporation in a part of its territory. It appears to be established that public utilities may be compelled to furnish certain services at a direct loss, so long as their rate schedules as a whole are adequate to provide a fair return.

The Classified Railroad Freight Rates.—An interesting example of the complexity and inconsistency of rate structures is afforded by the freight charges on American railways. There has developed a system of classified rates for different kinds of traffic which is intricate and chaotic in the extreme. The railroads have made enormous lists of every conceivable kind of commodity, with the freight rates which apply thereto. The classifications differ in three different districts of the United States. The rates established for the different classes are partly the result of historical developments, dating back to the pre-regulation period of our railroad history, where considerations of competition, cost, favoritism, and expediency were intermingled. It has been impossible for the Interstate Commerce Commission to unify and systematize this rate structure, so that it has been content to tinker with particular rates from time to time. Amid the confusion some general principles can be discerned. In particular, high grade commodities of considerable value pay generally higher rates than low grade commodities whose values are small. Thus, the rate on finished goods is usually higher than that on raw materials. Here the "value of service" principle is revealed. In other cases, differences in the cost of the service constitute the basis of the classification. Thus, carload lots are carried at lower rates than less than carload lots. The charging of higher rates for bulky than for compact commodities has also been justified on this ground. In yet other cases competition has been admitted as a factor, the rates for one commodity, such as live hogs, being fixed with reference to those of others which enter into competition with it, such as dressed pork. Again, the risk of damage has been held to justify high rates to compensate the railroad for the extra care and liability involved. Yet other rates have been established on general considerations of public interest.

Peak Demand as a Factor in Rates.—A problem of some impor-

tance for the public utilities is the apportionment of rates between those users whose demand comes at the peak, as compared with the off-peak, periods. The case of the telephone company, with its day and night service, is a good example of the principle involved. The demand for many public utility services is concentrated at particular hours of the day or seasons of the year. Electricity and gas for illuminating are wanted primarily at night, and more in winter than in summer. The demand for water is greater during dry than during wet periods. Street cars are wanted during the early morning and late afternoon rush hours. In such cases, if the company concerned can build up a class of customers who will patronize it during the off-peak periods, it can obtain those economies in the apportionment of its overhead which have been described. The desired condition is a load balanced in such a way as to enable the company to utilize its full capacity all or nearly all the time. We have seen that economic principles justify the offering of special rates to off-peak users to secure such a balance. Regulating authorities have recognized this advantage by permitting the companies to charge higher rates to peak than to off-peak customers. Frequently this has been done by apportioning the fixed costs among the various classes of customers on the basis of the percentage of the peak requirements which they demand. Such an allocation of overhead costs has some basis in that the plant must be constructed large enough to meet the peak demand. Consequently, those users whose needs are concentrated at the peak period are most responsible for the size of plant maintained, and for its idleness at other periods.

Against these considerations must be set the fact that, if a utility is permitted to charge the principal burden of its overhead to the peak users, no particular pressure is put upon it to develop its off-peak business. To a very considerable extent, irregular demand can be offset by policies of management which encourage the use of its facilities in its dull periods. An electric company can promote the use of vacuum cleaners, washing machines, ironers, toasters, etc., which will keep its plant running in the day time, when there is very little need of electricity for illumination. If the rate structure is so devized as to place part of the burden of overhead on the corporation itself, it has an incentive to go out and get the off-peak business which might not otherwise be there. Moreover, where the product furnished by the company can be stored and released gradually to the consumers as needed there is little necessity for discrimination in rates between peak and off-peak users. A water company can establish a reservoir large enough to provide for its maximum demand, and then keep its pumps running fairly steadily, accumulating reserves in the reservoir in anticipation of the peak period. Likewise, gas companies can operate their plants continually, storing the gas in tanks.

Customer Costs, Readiness to Serve Costs, and Quantity of

Service Costs.—The attempt to discriminate between peak and off-peak demand has led engineers to divide the costs of public utilities into three general classes and to develop rate schedules made up of three corresponding charges. There are, first, certain "customer costs," which are the same for all users of the company's facilities (or at least to all users of any one class) regardless of the amount they consume. These include such cost items as those incidental to the reading of meters and the making out of monthly bills. Then there are "readiness to serve costs" which arise out of the fact that the company must maintain a plant sufficient to meet the customers' maximum demand. This is held to justify a charge based on that portion of idle capacity for which he is responsible. Finally, there are "quantity of service costs" which represent the variable expenses, and which vary with the amount of service consumed by the customer. A rate schedule based upon such an apportionment of costs will usually consist of a minimum rate which the customer must pay regardless of the amount of service which he consumes, and a flat rate which is based upon his consumption as registered in a meter. The minimum rate covers the customer and readiness to serve costs, while the flat rate covers those attributable to quantity of service. Rate structures built upon such principles as these can be made quite complex. While they are often used, and have been allowed by the regulating authorities, they are rather unpopular, primarily because they are not understood by consumers. Considerations of good will make it better policy for a utility to maintain simple rate structures. A two-element rate, however, consisting of a minimum charge with a flat rate on the consumption is quite generally equitable and satisfactory. These considerations apply primarily to such facilities as water, gas, and electricity. Telephone rate structures involve still other principles, and the same is true of street railways and railroads. In fact, each utility has its own rate problems and technique. We must leave the details of these to the technical treatises and specialized literature.

Summary

The rates charged for public utilities in this country are subject to regulation by public utilities commissions. This amounts to the fixing of prices in industries which enjoy local monopolies. The practice of the commissions follows economic principles in fixing rates upon the basis of costs, including a fair return to the company on the fair value of its property. The ascertainment of fair value is a difficult problem. The capital stock of the company is no measure of it, because it may have no par value, or there may have been overcapitalization or depreciation of assets. Market value is equally bad, because it is a capitalization of earnings, so that its use would involve circular reasoning. The stockholders' prudent in-

vestment in the property (original cost) is most favored by authorities because it has stability and it assures a return on every dollar actually put in the business. The actual investment is hard to ascertain, however, and this method does not allow for the changing purchasing power of money. The estimated cost at present prices of reproducing a substitute plant is in principle a sounder basis for valuation, for it would lead to rates nearest to the normal prices of competitive markets and would stimulate good management; but it allows room for much conjecture and it leads to continually changing valuations. Whatever be the basis of valuation, some allowance must be made for actual expenditures honestly and prudently made in developing intangible assets such as going-concern value, and deductions may have to be made for any depreciation that impairs the service, but accumulated depreciation funds should be included. There is need for agreement on a consistent, rational valuation policy.

The fair return to be allowed on a property once valued should include pure interest on the capital, plus some reward for risks and efficient management, rates prevailing in competitive markets being used as a guide. Schemes by which surplus earnings are shared with consumers, or with the state, are worth attention.

Given an established level of rates, the specific rates for different classes of consumers should cover the operating costs directly attributable to the particular service, plus a share of the joint overhead costs proportionate to the relative demands. Commissions recognize this in using the "cost of service" and "value of service" principles, but more dubious considerations have also been admitted, as in the case of classified freight rates. There is justification for a rate schedule which puts the major burden of overhead costs on users whose demand comes at the peak period, but a more uniform rate system stimulates management to work out a balanced load. Rate schedules consisting of a minimum charge, to cover customer and readiness to serve costs, with a meter charge, to cover quantity of service costs, are much used.

SUGGESTIONS FOR FURTHER READING

Two recent and comprehensive treatments of public utility problems are M. G. Glaeser, *Outlines of Public Utility Economics* (1927) and Eliot Jones and T. C. Bigham, *Principles of Public Utilities* (1931). Another very satisfactory work is John Bauer, *Effective Regulation of Public Utilities* (1925). H. H. Hartman has made a careful analysis of the theoretical and practical issues involved in valuation in his *Fair Value* (1920). Good discussions of the problems involved in fixing specific rates of the various types of public utilities are to be found in H. Barker, *Public Utility Rates* (1917), and W. G. Raymond, *The Public and Its Utilities* (1925). These rate problems are also discussed in the other books which have been mentioned, with the exception of Hartman. Cassius M. Clay, *Regulation of Public Utilities* (1932) attacks the problem of

utilities from a legal and constitutional point of view. A symposium of articles on various phases of the public utilities problem was edited by Morris L. Cooke under the title *Public Utilities Regulation* (1924). For the problems of railroad rates and valuation in particular, see H. L. Vanderblue and K. F. Burgess, *Rates-Service-Management* (1923); W. Z. Ripley, *Railroads, Rates, and Regulation* (1912); and L. G. McPherson, *Railroad Freight Rates in Relation to the Industry and Commerce of the United States* (1909). In his *Social Control of Business* (1926), J. M. Clark develops a thoughtful economic philosophy of the problems of government regulation, with special emphasis on public utilities.

CHAPTER XIV

BUSINESS CYCLES AND THEIR CONTROL

A. The Nature and Course of Business Cycles

Fluctuations in Business Activity.—In this chapter we shall be concerned with those fluctuations in economic activity which are known as business cycles. The whole process of business life is subject to alternate movements of vigorous activity and subsequent stagnation which have long been a puzzle to students and business men. The influence of these movements is far-reaching. They affect not only production, prices, and trade, but extend into the lives of the people thru their effects upon wages and unemployment. It seems that they cause the whole life of man to pulsate in a social rhythm of ascent and decline. Even such apparently unrelated things as the prevalence of crime, the rate of marriage, and the number of births and deaths, are subject to this influence.

Phases of the Business Cycle.—Some writers claim to have proved the existence of eight, ten, and even thirty-three year economic cycles. The term "business cycle," however, is usually confined to movements which exhibit a sequence of four fairly well-marked phases. These phases are: prosperity, crisis (or recession), depression, and revival. Such cycles in the United States during the last half century have usually varied from three to five years in length, the average being a little less than four years. In other countries they have been slightly longer, altho not very much so. The four phases occur in the order named, but no one of them can be designated positively as the starting point. Most economists believe that it is a continuous sequence which has neither beginning nor ending.

The period of prosperity is one of relatively active business. Productive capacity is more or less fully utilized, and there is not very much unemployment. Prices and wages are high. After a time this wave of prosperity is checked and a recession occurs. If mild, this may be merely a moderate decline in production, prices, and employment; but frequently it assumes a serious aspect, more properly designated as a crisis. Then a strain in the loan market becomes manifest; credit is on the point of collapse; and business men are forced to liquidate—that is, to convert their assets into cash and pay off their debts. If the strain is too great, credit may collapse, and then we have an actual panic. After crisis, depression sets in. Now business is at its lowest ebb. The demand for goods appears to have shrunk, prices sink to low levels, the volume of production is considerably below

normal capacity. Factories are closed or on part time, and thousands or even millions of workingmen are unemployed. This stagnation lasts for a considerable time; then business begins slowly to revive. Production increases and prices rise. The increase of activity spreads gradually until a period of prosperity has again been reached. The cycle then repeats itself. No two cycles are exactly alike. They differ in duration, in intensity, and in many other details, but all exhibit the same general sequence of events. We shall describe these phenomena in greater detail as we proceed.

Indexes of Business Activity.—Within the past decade or two, economists have worked out a technique by which the movements of business activity can be measured with a fair degree of accuracy. The business cycle shows itself in many fields, and by gathering data indicative of activity in these fields a very good view of its development can be obtained. Among the indexes used for this purpose are statistics of production, especially those showing the output of pig-iron, coal, and other fundamental raw materials. The production of basic manufactured goods, such as iron and steel products, textiles and food products, and the volume of building and other construction, are also used. Since prices move upwards and downwards with the cycle, index numbers of the price level are likewise helpful. The banks are even more responsive to the cyclical movement. Consequently, statistics of bank deposits and reserves, loans and discounts, are widely used. The best index would be one showing fluctuations in the volume of trade itself; that is, the actual transactions taking place in the business world. This is not easy to measure, but it is rather clearly reflected in such items as checks cleared thru the banks, the shipment of goods over railways and other common carriers, and the volume of wholesale and retail sales of merchandize. Still other data which can be employed are wages, interest rates, unemployment, and business profits.

Statistical Measurement of the Business Cycle.—Unrefined statistics showing the movement of any or all of these things, however, do not accurately reveal the course of business cycles, for the latter are obscured by other changes, not cyclical in nature, to which business is subject. A conventional and purely hypothetical curve illustrating such changes is shown in Figure 5. Here the heavy, irregular line is intended to represent the movement of some phase of business activity over a period of several years as actually observed and recorded. On analysis, it is possible to discern three separate movements in this curve. To begin with, it is to be noted that the whole line has a generally upward direction, indicated by the straight line AB. This corresponds to that steady expansion of industry which goes on in any progressive community, and which may be thought of as its normal growth.[1] During the period of prosperity this growth is more rapid, while

[1] The slope for some types of economic activity, such as a declining industry, or even for business generally in a country that is moving backward industrially, may be downward. Also it may rise for a period of years, and then fall, or vice versa.

during depression it is slowed up, or, as in the present case, actually checked. Hence our curve takes the form of a line moving upward and downward, but each time rising higher than it was in the corresponding period before.

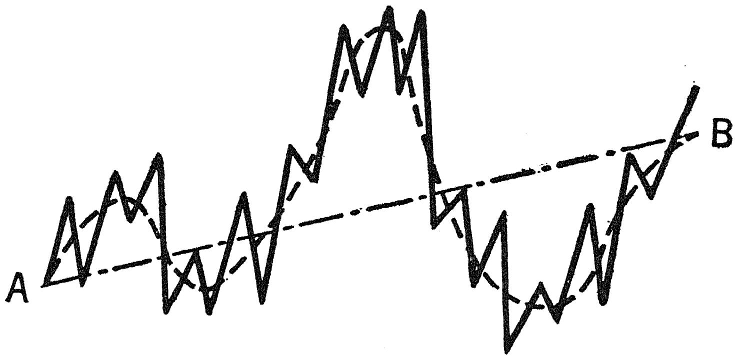

FIGURE 5. Seasonal Variation, Cyclical Movement, and Secular Trend.

The general direction of this ascent (from A to B) is known to statisticians as the *secular trend.* The broad deviations above and below this line, which are indicated by the curved line in the drawing, represent the *cyclical movement.* But industry is also subject to *seasonal changes,* some months in the year being more conducive to certain types of activity than others. These seasonal variations take the form of lesser variations in the curve. In our figure, they are the zigzag waves of the solid line above and below the curved line representing the cyclical movement. There are also usually some sporadic or random movements, less regular in nature, which may arise from such phenomena as strikes, the vicissitudes of the weather, or a variety of other causes. To simplify our illustration, we have assumed that there are no such random movements in our data. By appropriate methods, it has been found possible to make a correction in statistical data by which the secular trend can be removed; and, if it is found to be desirable, the seasonal variations can be eliminated also. A graph can then be plotted from the corrected figures which will show the cyclical fluctuations as movements like so many waves above and below a horizontal straight line. Figure 6 shows how our original graph would look after being corrected for both items. The secular trend has been reduced to the horizontal line A′B′, and the seasonal variations have been smoothed out, so that what remains is our former curved cyclical line, now represented on its new base as the solid line abcd. The complete movement from a to c, or from b to d, represents one cycle. Observe that the two cycles differ in both duration and magnitude. This is typical of such movements.

When one is dealing with items which are expressed in terms of money, yet another correction is necessary to allow for changes in the purchasing power of the dollar. For instance, figures showing the volume of production in dollars would increase rapidly during periods of rising prices and

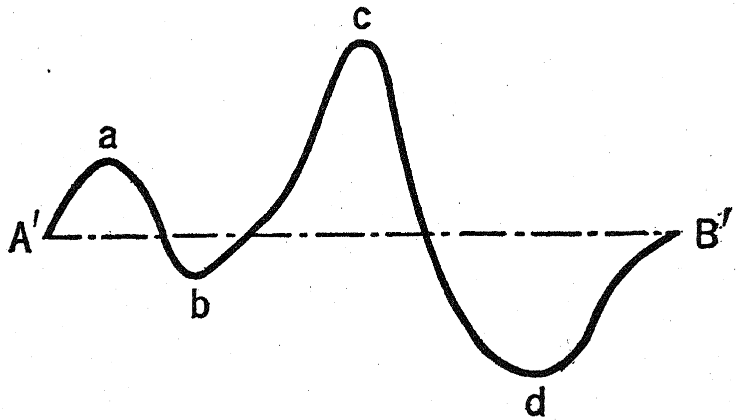

FIGURE 6. Cyclical Movement with Seasonal Variation and Secular Trend Removed.

decrease during periods of falling prices, but these changes do not reflect changes in the actual volume of goods produced. They would merely indicate the alterations in the value of money itself. Were the figures to be corrected by an index number of prices, so that the volume of production could be shown in terms of the price level as of a certain date, any changes then remaining in the data would be changes in the volume of production itself. With the data made available from such sources as have been indicated, and with the necessary corrections for secular trend, seasonal variation, and the price level, a very good index of the business cycle can be obtained. It may consist of a composite figure, including a number of indicative items, or of a single item, known to be sensitive to changes in general business activity. Among the most suitable items for such a purpose are the volume of bank clearings outside of New York city,[2] the velocity of circulation of bank deposits, and the volume of production.

An Index of Business Cycles in the United States.—In Figure 7 there is given in graphic form an index showing movements of the business cycle in the United States from 1875 to January, 1938.[3] This index is based upon bank clearings outside New York, corrected for changes in the price level, seasonal variations, and secular trend. It shows only the truly cyclical movements, except for random sporadic fluctuations which occur from time

[2] Bank clearings inside New York city are excluded because bank transactions in New York are so largely composed of financial and speculative transactions that they are not sufficiently indicative of the general trend of business activity.

[3] Based on the index prepared by Carl Snyder for the Federal Reserve Bank of New York.

to time. The heavy line marked 100 shows what may be regarded as the normal trend of business. Upward movements of the curve indicate periods of business expansion, and downward movements show the periods of decline. The upward peaks of the curve are the turning points when

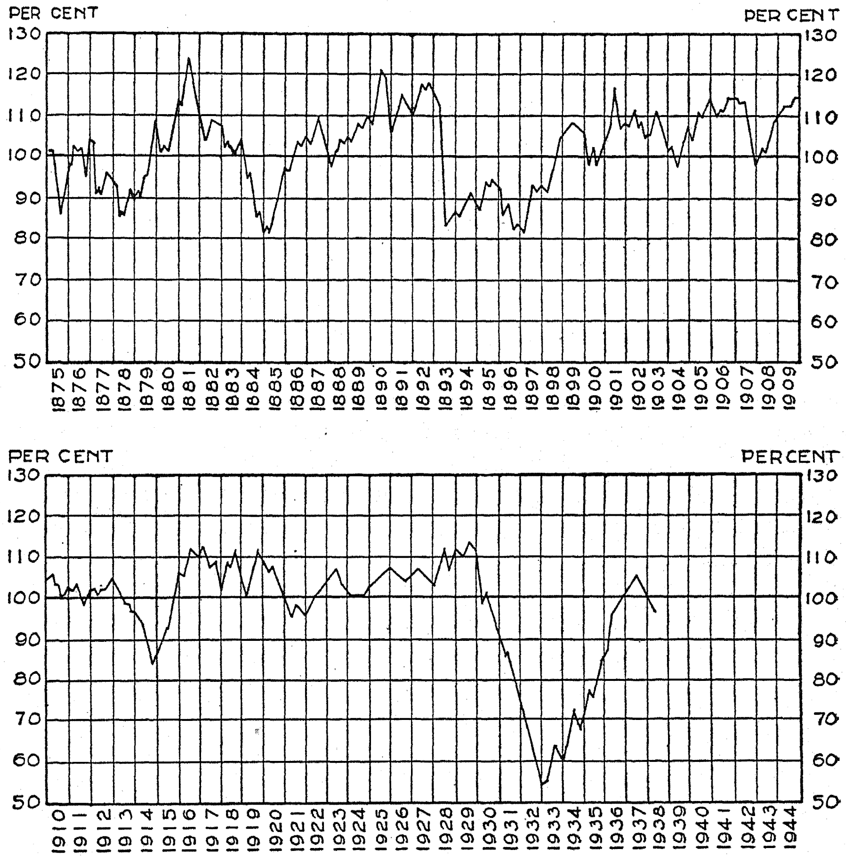

FIGURE 7. A Clearings Index of Business in the United States (after Snyder).

recession sets in, while the lowest points in the troughs represent the transition from depression to revival. The curve shows fourteen periods of business decline, followed by revival, in the years covered by the chart.

B. Explanations of Business Cycles

External and Internal Causes.—If we think of the economic process as consisting primarily of those phenomena which are associated with money and the price system, it is apparent that important events occurring outside of that system may exert great influence upon it. Some writers

regard the phenomena of business cycles as being the result of repercussions in the economic process to such occurrences. For instance, there are said to be cyclical movements in natural phenomena, such as temperature and rainfall, which are supposed to cause variations in the yield of agricultural crops. Since agriculture is an important branch of production, fluctuations in it may upset the balance of industry and thereby affect business conditions generally. Other economists have stressed the influence of such cataclysmic events as earthquakes and wars, which may seriously disturb the economic balance of a nation or a whole group of nations. A number of writers have emphasized the importance of new discoveries and inventions as factors which give an impetus to industry, and thereby start an expansive movement which eventually spins itself out, until some new impelling occurrence comes along to stimulate another expansion.

There is no denying that external forces of this kind may have powerful stimulative or depressing effects upon economic activity; but it is hard to see how the sporadic occurrence of a war or an earthquake can explain the rather uniform, rhythmical, sequence of phases which is characteristic of business cycles. Alternations of crop activity constitute a more satisfactory explanation in this respect, but it has not yet been proved that climatic and crop cycles are correlated closely enough with business cycles to account for the occurrence of the latter. Altho no two business cycles are alike, the fact that they have a generally similar pattern suggests that there must be something in the nature of the economic process itself which is responsible for such movements. Even tho a war or the opening up of a new territory might start an economic expansion, we have still to look within the economic process for the forces which cause the expansion to take the particular form that it does, and eventually to bring about a reaction which culminates in a depression.

Some students of the problem believe that there are enough internal causes to account for all the phenomena commonly observed in business cycles, without the necessity of introducing any external causes into the explanation. Others say that external factors provide the impulse which starts a wave-like movement of business, while internal factors explain the cumulative and rhythmical effects of action and reaction which follow after the impulse has taken effect. Perhaps the most reasonable attitude is to regard certain factors in the economic process as making for a condition of inherent instability of such a nature that any disturbing force, either from within or without the system, can set in motion an expansion or contraction which is cumulative and rhythmical in character. What these internal factors are will be developed in the course of our analysis.

Psychological Waves of Optimism and Pessimism.—Another group of students believes that business cycles are the result of waves of feeling which sweep over the business world from time to time. According

to this view, the phase of prosperity is one in which business men are unduly optimistic, and this begets unwise and reckless adventures. There is a process of cumulative error resulting from an exaggerated estimate of the possibilities of expansion. The errors are presently revealed when market realizations do not come up to expectations and profits are succeeded by losses. The resulting disasters cause a feeling of worry and anxiety, often of actual fear, which permeates the world of finance and is partly responsible for the collapse of credit. This is succeeded by a tone of pronounced pessimism which helps to maintain the depression and prevent the speedy recovery of business. Too much stress is laid on these factors, however, when sole responsibility for the occurrence of business cycles is laid at the door of social psychology. There must be underlying economic causes for the changing mental attitudes of business men. Hence, it seems probable that waves of optimism and pessimism accompany, accentuate, and perhaps prolong prosperity and depression, but are not the primary causes.

Monetary Inflation and Deflation.—The business cycle is a phenomenon peculiar to those economies which have a highly developed system of money and credit. Many of its characteristics, in fact, are clearly monetary in character. The period of revival and prosperity is one of monetary inflation, when an increase in production is financed by expanding bank credit, and accompanied by a consequent increase in the general price level. The crisis, if at all severe, is conspicuously a time of financial strain, when credit is hard to obtain, loans are being called, and everybody is seeking to make his position as "liquid" as possible by converting his assets into cash. Credit then shrinks noticeably in volume, hoards of cash are accumulated and bank balances are allowed to lie idle. Thus the circulating medium shrinks in volume, constituting a deflation which continues during the depression, accompanied by a fall in prices due to the reduced flow of currency.

These facts lead some economists to attribute business cycles primarily to monetary causes. The medium of exchange on which the modern economy depends is an intangible and precarious structure of credit, based on very small reserves of cash and dependent for its continued existence on the solvency of most business men and the general preservation of confidence. Thru the power which the banking system has to extend new loans when demand for them is brisk, the volume of credit is easily expanded; but the amount of such expansion is limited, and the reaching (or even approaching) of its limit may cause serious trouble. Moreover, since the whole structure is based upon loans, its integrity depends upon the ability of borrowers to pay their loans when due, so that if anything happens to weaken the security of debts, the structure of credit may readily collapse.

These occurrences are so obviously a feature of business prosperity and depression that they cannot be left out of account in any theory of the business cycle, but it is too much to attribute cycles to these causes alone. One

must ask what it is that starts a monetary expansion and what difficulties in the industrial process bring the expansion to a close and produce a contraction. Surely there are some maladjustments in the underlying structure of production, distribution, and consumption which are partly responsible for the monetary disturbances. The complete explanation of business cycles must take account of these underlying difficulties. But all students of the problem agree that monetary deflation and inflation must occupy an important place in the explanation.

The Overinvestment Theory.—Another theory attributes business cycles to overinvestment, or, to state it more accurately, to a disparity between investment and voluntary savings. Economists have usually assumed that permanent capital comes into existence thru the investment of savings voluntarily accumulated by the recipients of incomes. However, it is possible for investments to come out of bank loans which do not have their source in voluntary savings. When commercial banks make loans to their clients, the bank does not necessarily give up money previously placed in its hands by depositors. It may do so, but when bank credit is expanding, it may give the borrower credit on its books newly created in return for his promise of repayment. This credit then constitutes a deposit against which he may draw checks. The effect is an expansion of monetary purchasing power. Altho the loan may be nominally for a short period, the borrower may expect to renew the loan indefinitely or to obtain funds for its repayment from the sale of securities. So, purchasing power is put into the hands of business men for permanent investment, which means that they are given funds with which to buy durable capital in competition with the expenditures of consumers for immediately consumable goods. The currency expansion causes prices to rise, but consumers do not at first have any more purchasing power than before. Consequently, they can buy less of consumers' goods. They have been forced into involuntary saving by rising prices, in order that new capital might be created thru the inflation of bank credit. This is sometimes referred to as "forced," or involuntary, saving.

Two difficulties are created by this process: (1) eventual shortage of funds with which to complete the financing of the investments thus begun; and (2) a rise in the costs of such investment due to subsequent increase in the demand for immediately consumable goods. Consider the first of these difficulties: The expansion of investment takes place on the assumption that eventually securities can be sold to investors to make good the advances from the banks. But since the amount of investment exceeds the amount of funds made available for the purchase of securities by voluntary savings, the process can go on only so long as bank credit expansion can continue. This has its limits, as we know. When bank reserves get dangerously low, so that further expansion of credit is impossible, many business men are caught without any means of financing the completion of the capital construction

projects which they have undertaken. This might be enough in itself to start a downward movement. It is accentuated by the second difficulty—the rising costs of the construction projects which are under way. The rising rate of interest attendant upon the growing scarcity of bank credit is an important factor here, and there is another of considerable significance. When the funds created by the banks for new investment are spent by business men in the construction of durable capital, they lead to an increase in the money incomes of wage-earners, as well as of others who supply the productive factors employed in the construction work. While some of this extra income is no doubt saved by the recipients, most of it is probably spent in consumption. Thus there arises a great increase in the demand for consumption goods at the very time when enterprizers are endeavoring to increase the stock of durable capital. Since this capital will not yield its products until some time in ~~the future~~, it is not available to satisfy the pressing demand for consumable goods now. The result is a sharp rise in the price of consumption goods, which leads the producers thereof to bid actively against the constructors of capital for the available agents of production. This raises the costs of constructing the capital above what was anticipated, so that prospective profits are turned into losses. Consequently, the investments prove a failure. The projects which were started may never be finished, or, if completed, their value will be less than the amount invested in them. So the boom, started by the expansion of credit, collapses, and a period of deflation takes its place. Now investment falls short of voluntary saving, leading to an accumulation of idle bank balances and other hoards. This makes credit abundant and cheap, favoring a revival of investment, which eventually ensues. Then a new expansion begins.

According to some theorists, the basic weakness in this process of overinvestment lies in fluctuations of the bank rate of interest. There is presumably a normal, or equilibrium, rate of interest which will keep the demand for savings (*i. e.* investment) in balance with the supply of them. If the supply exceeds the demand, the rate should fall, tending to restore the balance by stimulating borrowers and discouraging savers. If demand exceeds supply, the rate should rise, so that borrowing would be reduced and saving encouraged. However, the banks are not so much concerned about equilibrium in the long-term investment market as they are about the state of their reserves. Following deflation, when their reserves are large, they encourage borrowers by offering funds at a rate of interest somewhat below the normal, thus stimulating investment and business expansion. When prosperity is well under way, the shrinking reserves cause banks to raise their interest rate above the equilibrium figure. Then the cost of loans exceeds the prospective earnings of capital, thus causing actual or prospective losses, and starting a deflation. Observe that this theory finds much of the trouble to lie in bank credit inflation and deflation, being thus in harmony with the monetary

theories. But it goes further, by explaining the unbalance which prevails between those industries which are producing durable capital and those which are making goods for immediate consumption.

The overinvestment theory, in one form or another, probably has more adherents among competent economists than any other. It appears to contain an important element of truth; but, like the others which we have considered, it needs to be supplemented by certain additional factors in order to give us a completely satisfactory explanation.

The Underconsumption or Oversaving Theory.—Looked at from one point of view, the theory just explained finds the cause of business depression in undersaving and overconsumption; that is, not enough is saved to finance the capital construction projects which enterprizers have commenced, and too much is consumed to permit them to obtain the necessary productive factors to complete these projects. There is another theory which is, in some respects, just the opposite. According to this theory, too much is saved in relation to what is spent for consumption. This saving leads to an increase in the stock of capital equipment, which eventually increases the output of consumers' goods. But consumers' expenditures are not sufficient to purchase these goods at prices which will cover their costs; prices must therefore fall, bringing losses to producers and precipitating a slump in business activity. According to this analysis, the fault does not lie with the banking system, for the saving is not involuntary; it is rather a result of excessive thrift. Socialistic writers, who are the originators of this theory, believe the trouble lies with the unequal distribution of incomes which prevails in capitalistic society. The propertied classes have so much that they cannot consume it all and must, almost of necessity, invest it in industry; but the wage-earners, who constitute the masses of consumers, receive so little that they are unable to buy the resulting product. Other economists say that the source of the difficulty rests in the fact that wages do not go up as fast as commodity prices in periods of technological progress or cyclical boom. The resulting lag of costs behind selling prices gives rise to excessive profits, which profits are reinvested, so that productive capacity and output increase at a more rapid rate than expenditures for consumption. There may also be some lag in farmers' incomes which likewise slows up demand for consumers' goods, for manufacturing industries rely to a considerable extent upon farmers to buy their output.

Some writers appear to believe that any saving necessarily involves the economic process in a dilemma, because, they say, saving necessarily withdraws money income from demand at the same time that it increases the supply of goods. In this naïve form the theory is clearly untenable. To begin with, saving, if accompanied by investment, does not withdraw money from the demand for goods; it merely directs it into new channels. The money saved is paid out for instrumental capital instead of for consumers' goods.

Now, money spent in the purchase of producers' capital is just as truly a demand for commodities as if it had been spent for clothing or food. If a community, having an income of one hundred million dollars in a given period, saves ten per cent of it, there is a demand for ten million dollars worth of instrumental capital and ninety million dollars worth of consumers' goods in that period. If the industries of that community will produce instrumental capital and consumers' goods in those proportions, there will be no overproduction of either, for the time being, and demand and supply will be in balance.

However, it is true that, as more productive equipment is created, the supply of consumers' goods will increase. This means that the prices of consumers' goods will eventually fall, thereby causing a decline in business profits, unless one of two things happens. If the flow of money increases in proportion to the general increase in production, no fall in prices need occur. This may well be the case, for when production in general is increasing, we might normally expect some corresponding increase in the monetary circulation; and this is especially likely to be true during a period of business prosperity when, as we know, there is generally some inflation of the currency. But if this does not happen, it need not cause any disturbance, for the increase in production brought about by invested savings is likely to be accompanied by a corresponding decrease in costs of production. More productive equipment means increasing roundaboutness of productive methods. These roundabout methods effect economies in production which should be reflected in lower physical costs. Because of the tendency to diminishing productivity, these economies grow less as the process is extended, it is true; but if the extension is the result of increased saving, this decline should be offset by some reduction in the rate of interest. Moreover, if the increase in investment takes place steadily and gradually, we may expect improvements in the technique of production to keep pace with it, and these likewise tend to reduce costs. These considerations lead us to conclude that savings do not *necessarily* cause a fall in profits nor lead to a situation which can properly be described as underconsumption or oversaving.

Nevertheless, this reasoning does not entirely dispose of the underconsumption theory. It is possible for the amount of investment to be too large, in relation to expenditures for consumption, just as it is possible to produce too much of any commodity, such as coal, in relation to the demand for it. The actual or prospective earnings of investment will then fall, just as the price of coal would drop under such circumstances. In both cases, the decline sets in motion forces which tend to restore a balance. When the price of coal falls below the cost of producing that commodity, less coal is produced, so that the price rises again. Likewise, when the earnings of investment fall below the rate which will induce savers to part with their funds, the supply of savings should shrink until earnings rise again. Would this drop take

the form of a crisis and lead to an ensuing depression? It is conceivable that it might. In the optimistic exuberance of a period of expansion, investors might not anticipate the reduced earnings which would follow from too great an increase in capital equipment until the oversaving had gone so far that a critical period of readjustment was inevitable. The theory has, therefore, some plausibility.

There is no reason to suppose, however, that this is a necessary result of inequality. The rich do not have to invest any more of their incomes in industry than they care to. There are plenty of opportunities for spendthrift consumption, as well as for constructive philanthropy. If the prospective rate of interest did not offer them a sufficient inducement to make investment seem worth while to them, it is reasonable to assume that they would turn to these other alternatives. The trouble, then, lies not so much with the existence of inequality as with faulty anticipation of earnings and the faulty behavior of the interest rate. It might well be, however, that a rapid change in the distribution of incomes, such as the increase in wages in relation to profits stressed by some proponents of the oversaving theory, might cause an increase in saving too rapid to be corrected by a fall in the interest rate. This is at least a tenable hypothesis.

For many years the underconsumption theory was confined to socialistic circles and was generally rejected by competent economists. Within the past two decades, however, it has found adherents among a number of economists of standing, especially in the United States. The majority of careful students of the business cycle, however, are more inclined to the overinvestment theory.

Magnified Fluctuations in Demand for Durable Goods.—It has repeatedly been noticed that those industries which are engaged in the production of fixed capital, such as the construction of buildings, industrial plants, railroads and railroad equipment, shipyards, and the like, are the ones which suffer the most extreme fluctuations in the different phases of the business cycle. This is also true of those industries producing durable consumers' goods, such as automobiles and dwelling houses. This has led to the development of a theory sometimes called the "principle of acceleration," but perhaps best described as a *magnification of fluctuations in the demand for durable goods*. From time to time there are shifts in consumers' demand as a result of new inventions or changes in habits. These changes lead to derived changes in the demand for the equipment which is used in the production of consumers' goods; but the latter demand necessarily fluctuates much more violently than the demand for the consumers' goods on which it depends.

This can be illustrated by the automobile trade. If the same quantity of automobiles were sold every year, there would be a certain amount of fixed capital in automobile manufacturing plants to be replaced annually on account of worn out machines, depreciated buildings, and the like. This

replacement might amount to, let us say, ten per cent of the total capital invested in the industry. If, however, in any one year, there is a ten per cent increase in the effective demand for automobiles, in the absence of unused capacity in the industry, equipment will have to be provided in addition to the annual replacements, and equal thereto in amount, in order to provide for this expansion. This means that the new capital requirements of the industry in that year will be doubled. A ten per cent increase in the demand for finished products has created a hundred per cent increase in the demand for producers' goods. On the other hand, if, in any one year, the effective demand for automobiles falls off ten per cent, there will be no need to replace the ten per cent depreciation of capital, and the demand for new equipment and building construction in the industry for that year will practically cease. A ten per cent decline in the demand for finished goods has reduced the demand for producers' goods almost to zero. As a result, those industries which provide buildings and machinery for the automobile manufacturers will be subject to extreme fluctuations of activity and stagnation. This is typical of the situation in other lines.

It is also true of durable consumers' goods. Consumer purchases of such perishable products as food and clothing do not vary greatly from year to year, for people must eat and dress in order to live, and as these goods are rapidly used up, they must be continually replaced. But this is not the case with such things as houses, furniture, and automobiles. If consumers' incomes are shrinking, repairs to their homes can be postponed, the old furniture can be kept in service, and the old car can be run for another year or two; therefore expenditures in these directions are drastically curtailed. When consumer incomes increase, on the other hand, there is not much occasion to spend more on clothing or food, so the surplus is used to repair homes, buy new furniture, and purchase new cars. The development of science and invention causes similar fluctuations in the durable goods industries. When a new kind of product or a new mechanical device is invented, much capital equipment in the industries affected may be rendered obsolete. There will be an enormous demand for the new equipment until the obsolete capital has been replaced, after which the demand will decline to a fraction of its former level.

This theory will explain why the durable goods industries are more seriously affected by cyclical fluctuations than other industries; but, standing by itself, it does not constitute a complete theory of business cycles, for it does not explain the expansion and shrinkage of *total* monetary demand which is characteristic of the alternations of prosperity and depression. An increase in the demand for, say, railway equipment would necessarily be offset by a decrease in the demand for something else, so that total demand would remain the same as before, unless there was a change in the monetary circulation. If, however, the railway expansion is the result of newly created

credit (the involuntary savings process of the overinvestment theory) there need be no shrinkage of money demand elsewhere, and a general expansion might be initiated. Likewise, with a decline in the demand for railway equipment; in the absence of a shrinkage of currency, the money not spent in the railway industry would find its way into other channels, so that the total demand would remain the same as before; but if the reduced investment in the railway industry is used to pay off debts, or is hoarded, so that there is a decrease in the monetary circulation, a general contraction might be initiated. These observations lead to the conclusion that the theory under discussion is best regarded as supplementary to some of the other theories which have been explained, but it does elucidate one link in the chain of business cycle causation.

The Uneven Movement of Costs and Prices.—We have seen that the ups and downs of business activity are accompanied by a rising and falling general level of prices. However, these prices do not all move in exact correspondence. Some are much more responsive to inflationary or deflationary influences than others. In particular, the prices of public utility services, such as railway and electric power rates, which are controlled by governmental regulation, and the prices of commodities controlled by monopolies, are relatively inflexible. The same is true of wage rates, especially in organized trades where labor unions have enough power to resist wage reductions, and where employers' associations can resist wage advances. Interest on fixed money indebtedness, and amortization charges for the same, likewise do not change during the life of the particular loan involved. In the case of bonds this may be a long period. On the other hand, there are some prices which change rather freely. This is true in competitive industries generally, including most agricultural products and a great many raw materials. Short-time interest rates are also easily readjusted at frequent intervals.

These disparities in price movements are undoubtedly significant in accentuating the movements of the business cycle. The relative stability of wages and long-term interest rates is particularly important. When commodity prices begin to rise as a result of some expansionary impulse in the economic system, the lag of wages and interest causes a widening spread between costs and selling prices, which spread is a source of increasing profits to business men. These profits encourage further expansion, aided by the banks, which becomes cumulative. As the upward movement proceeds, unemployed labor, unused plant capacity, and hoarded savings are gradually drawn into industry until they become increasingly scarce. In an attempt to continue the expansion, enterprizers now bid up the prices of these factors, so that at this stage they rise faster than the increase in the prices of finished products. Profits now begin to shrink, and may easily be converted into losses. Those industries which have the greatest difficulty in raising the prices of their

products will be hardest hit by the increase in cost, and may be forced into bankruptcy. The expansion comes to a halt, and recession sets in. In the ensuing deflation the flexible prices fall faster than the inflexible ones, and, in particular, the selling prices of commodities drop more rapidly than such factor costs as wages and interest. This accentuates the deflation. As unemployment becomes extensive and hoarded funds excessive, wages and interest rates slowly decline, until eventually they reach a point low enough to permit a revival. Here, again, is a theory which explains some of the factors which aggravate the movements of the business cycle, but, like most of the other theories we have examined, it must draw partly on the monetary theory for its explanation. It is helpful, but not a complete analysis.

How Prosperity Is Generated.—By drawing the threads of these various theories together, we will now be in a position to get a pretty clear picture of how the business cycle runs its course. The description must be in general terms, and we must remember that each cycle exhibits differences of detail; but something like the following sequence of events usually takes place. Let us begin with the assumption that a depression prevails and trace the factors which start a revival and lead on into a period of prosperity. In the depression there is unemployed labor and unused plant capacity. Hoards of cash exist in the form of idle bank balances and large bank reserves. As a consequence of these things, prices, wages, and interest rates are low. Moreover, the banks are in a position to supply ample credit to borrowers who have a reasonable prospect of meeting their obligations. So, the business situation is one in which any stimulus can readily start a general expansionary process. Such a stimulus may come from internal sources. Stocks of merchandize may have become exhausted to the point where production must be increased in order to meet current demand, or capital may be so worn out that replacements are urgently needed. Or, some external event may give the needed impetus, such as a war, with its tremendous demand for munitions of all kinds, a new invention, giving rise to a new industry, an increased demand from abroad, due to a change in the international trade balance.

In one or another of these ways a few progressive business men begin to make new investments, drawing on their cash balances at the banks, or possibly making new loans for the purpose. The sums so invested are paid out to the owners of the factors of production employed in the new ventures and spent by the recipients, mainly for consumers' goods. This increases the demand for the latter and leads to expansion in the industries producing them. They, in turn, increase their production, drawing funds from hoards or loans, and make further payments to productive factors. So the expansion spreads from industry to industry in an endless chain. As it gets under way, selling prices rise faster than costs, leading to profits, in the manner described in the preceding paragraph. This leads to a general return of con-

fidence and encourages further expansion. The process is cumulative, the monetary medium necessary for continued expansion being supplied by bank credit inflation. Confidence grows to optimism and optimism develops into enthusiasm. Before long, a wave of prosperity is in full swing. Labor and resources are relatively fully employed, prices are high, and profits are good. This prosperity may continue for some months or years, depending on the strength of the stimuli at work and on the particular form that the development takes. Let us now see what happens to bring it to an end.

The Crisis or Recession.—In the process of expansion just described all of the several factors which have been analyzed in the foregoing explanations of business cycles have been at work. There are the initial stimuli from external events and internal developments; the psychology of optimism, tending to errors of overanticipation, is present; monetary inflation is going on. As a result of this last, investment is running ahead of savings. The demand for durable goods is being magnified. Productive capacity is increasing faster than consumption, and selling prices are running ahead of costs. All of these tend to generate strains in the economic process which must, sooner or later, reveal fundamental weaknesses in the situation. So long as unused plant capacity, unemployed labor, and ample reserves of credit are available, these weaknesses may not appear to be serious, but when production approaches the point where existing resources are fully utilized, and credit is near the limit of expansion which existing bank reserves permit, further expansion becomes increasingly difficult. Even if credit is still available, the scarcity of productive resources means that further monetary inflation will only increase prices without any substantial increase in the output of goods. Now, in the exuberance of the boom, construction projects may have been begun on the assumption of a continued increase in demand, which projects now come to a halt for lack of finances with which to continue them; or, the total volume of undertakings which have been contracted for may exceed the capacity of industry to produce. Frenzied bidding for the scarce agents of production ensues in order to complete these contracts. This raises the price of the productive agents to the point where costs rise above the actual or prospective earnings. Costs have also been increased by the growing inefficiency which characterizes a period of active business. In a revival the most efficient labor is employed first, then, when it becomes scarce, less efficient workers are hired; moreover, in the general process of speeding up, inspection gets more lax and quality suffers. Meanwhile, credit is increasingly difficult to obtain, the banks becoming uneasy because of their shrinking reserves and the increasingly precarious position of many business enterprizes. The banks refuse new loans and scrutinize with unusual care applications for the renewal of old ones. Under these conditions it would not take much to precipitate a collapse, which will be more or less severe according to the circumstances.

Recession sets in when some important industry or group of industries incurs such losses that it cannot meet its obligations. Some large businesses fail, and, in failing, may cause failure of the banks which financed them. This in turn causes difficulties for other concerns which depended upon those banks for credit. There now starts a process of progressive contraction which is just the reverse of the expansion previously described. The industries which are first to curtail dismiss their employees, stop paying dividends, and may not even pay interest on their bonds. This reduces the incomes of wage-earners and property-owners, who are thereby forced to curtail their expenditures. Thus there is a decline in demand for products of other industries, which, in their turn, are forced to contract, dismissing more employees and reducing dividends and interest payments to other security holders, and perhaps embarrassing other banking institutions. The contraction spreads by this process from industry to industry. Optimism turns to such pessimism that everyone, including the banks, is afraid to extend credit to anyone else. So there is pressure to pay off one's debts by converting every possible asset into cash. There ensues a general process of liquidation, in which commodities and securities are thrown on to the markets for such prices as they will bring. Prices fall, but costs fall less rapidly, causing further losses and accelerating the general downward movement. The process of contraction gathers momentum, until production and employment are reduced to a low level. In the process of liquidation there is a general deflation of currency. Part of the circulating medium actually disappears, thru the reduction of bank deposits which comes from the paying off of loans, or the writing off of bad loans as losses in the case of business failures. Another part is hoarded, in the form of idle bank balances or actual cash. This shrinkage in the currency is the vehicle for the shrinkage in prices.

Panics.—If the crisis is very acute it may degenerate into a panic. Since fully nine-tenths of our business transactions are paid for in checks drawn on bank deposits, against which only a small cash reserve is maintained, there is not enough money in the country to do the work of business if, for any reason, the mechanism of bank credit should cease to function. Now, bank checks are accepted in payment of debts only so long as people generally have confidence that the banks will honor them. If this confidence is destroyed, or if for any other reason bank checks cannot be accepted, there is an actual shortage of money to carry on the transactions of exchange. Fear then seizes the business community, and all depositors rush to the banks in an effort to withdraw their funds. Reserves of cash being insufficient to meet these demands, the banks are forced to close their doors. This collapse of credit paralyzes business. Failures take place in great numbers and the business world is in chaos. Panics do not accompany every recession. They occur only in crises of unusual severity.

The Ensuing Depression.—The fall in prices necessitated by liquida-

tion sounds the death knell to business profits, and without the prospect of profits business activity does not go on. When everybody is trying to sell and get rid of reserve stocks, there is very little demand for further production. Then ensues a time of industrial stagnation. Industrial plants close down or continue to operate at less than normal capacity. Thousands, even millions, of employees are laid off, as we learned in the chapter on unemployment. Wages drop. Poverty is widespread. It is a time of great suffering for the workingman. No new construction is undertaken. The period of stagnation in which business is now plunged may be more or less severe and more or less prolonged, according to circumstances. Usually, the more feverish the preceding period of prosperity has been, the more drastic the recession and the more prolonged the depression. But it cannot go on forever, for existing stocks or merchandize become depleted, the populace must still be fed and clothed, and more commodities must be produced. Conditions are now ripe for revival, as explained in the beginning of this analysis. Business gradually resumes, and the cycle is repeated once more.

C. The Control of Business Cycles

The Need for Business Stability.—There are those who say that business fluctuations are not undesirable. Progress in production, they believe, takes place rapidly only when inflation is going on, while the subsequent reaction of depression is necessary to correct the mistakes which take place during the period of prosperity. Most persons, however, would object to this view as unduly pessimistic. Our economic system must be a poor one indeed if we cannot hope to make progress with it save by such spasmodic convulsions as have characterized the course of business during the last half century. The apparent prosperity of the expanding phase is largely an illusion, because in this period so many mistakes are made which must later be corrected. The resulting depression is a harvest of calamity and suffering. Can we not hope for a more orderly and stable course of business activity?

Can We Control the Business Cycle?—There are two obstacles which must be overcome before we can hope really to eliminate the severer phases of business fluctuations. In the first place, we must be sure that we understand their causes. In the past there has been such diversity of opinion among economists on this point that it was difficult to know what sort of remedy was most likely to prove successful. It is becoming increasingly apparent, however, that the various theories supplement each other in such a way that they can be synthesized into a fairly consistent whole. This gives grounds for believing that some measures can be agreed upon that should prove effective in at least mitigating the severity of business depressions. In the second place, so long as business is conducted by many thousands of individual enterprizers, each of whom is free to follow the dictates of his own judgment, there will continue to be room for such lack of balance in

industrial affairs as may throw business out of adjustment. To correct this may require a much more highly centralized supervision of economic affairs than now exists, a wisely directed system of economic planning, possibly even the socialistic control of industry. These are issues so complex, reaching as they do deeply into the roots of the economic order, that we must leave them for fuller discussion at a later point in our study.[4] Meanwhile, we may consider some measures of control which will at least reduce the severity of cyclical fluctuations.

The Control of Money and Credit.—We have seen that practically all students of business fluctuations agree that the phenomena of money and credit play a very important part in the ups and downs of the cycle. Whether or not one accepts a purely monetary theory of prosperity and depression, it is clear that expansion and contraction of the medium of exchange, especially of bank credit, provide a vehicle for the rise and fall of business activity, without which the movements could not assume the form that they do. Bank credit expansion makes available the funds for involuntary saving, overinvestment, the expansion of durable goods industries, and the rise of prices and profits, on one or more of which phenomena the various theories of the cycle lay stress. Subsequent collapse and progressive shrinkage of credit are deeply involved in the process of liquidation and falling prices which characterize the downward spiral of recession. Therefore, it would appear that the most hopeful approach toward reducing the severity of cyclical fluctuations would be thru the control of money and credit. Various devices are at the disposal of the government and central banking authorities by which bank credit expansion in time of revival could be resisted, and perhaps prevented, and by which contraction in time of recession could be checked, or at least reduced in severity. Many students believe that resolute and intelligent use of these controls would shape the course of business activity towards a considerable degree of at least relative stability. Others believe that we can go even further, thru the adoption of a definitely managed currency which will maintain a stable general level of prices. These proposals will be developed in greater detail in the next two chapters following.

Public Works and Fiscal Policy.—In Chapter IX it was suggested that cyclical unemployment can be reduced by liberal government expenditures for public works during business depressions. This same policy can be used to combat the depression itself. We have seen how, at a time of crisis, the curtailment of activity in one or more important sections of industry starts a vicious circle of contraction, the reduction in spending by business enterprizes causing a shrinkage of consumer incomes and consumer demand, which causes a further curtailment of business activity in other lines, and so on, until contraction becomes general. If, very early in the development of this downward movement, the government will step in with large ex-

[4] See Chapters XXVIII, XXIX, and XXX.

penditures to counteract the drop in business spending, the progressive decline can perhaps be checked, and depression avoided. If such a policy is to be successful, however, it must be begun promptly, and it must be done on a large scale.

This raises certain problems of fiscal policy. The funds to be spent by the government must be obtained in a way that will not have a depressing effect upon industry. This means that, for the most part, they must not be raised by new taxes, which would only reduce further the amount of private spending. The government must, therefore, borrow. Even in times of business contraction the bonds of a strong government find a ready market, for the credit of such a government is good enough to inspire investors with confidence in spite of business uncertainty. Therefore, funds which would otherwise be hoarded will be loaned to the government, which, thru its spending, can restore them to circulation. The public works program, if financed in this way, has thus an inflationary effect which offsets, to some extent, the general tendency towards deflation. This is just what is needed. It involves the danger, however, that it increases the public debt, so that if the desired stimulating effect on business is not soon achieved, and the deficit spending has to be prolonged, the government's credit may eventually be undermined, and the results may be more serious than if the depression had been allowed to run its course. For this reason a governmental spending program of the sort here suggested is opposed by conservative critics, who believe that government credit should be kept unimpaired by keeping its expenditures strictly within its revenues. Certainly a government must, in the long run, have a balanced budget; but it need not be balanced in any one year. It may, therefore, incur debt with safety in times of contraction, *provided it pursues a rigorous policy of debt retirement in time of prosperity.* Increased taxation during the upswing to pay off debt incurred in the downswing will help to check the inflationary tendencies of business expansion, and will keep the budget balanced over a period of years. There are political difficulties in the way of this, however, for taxes are never popular, so that legislators are much more inclined to borrow for spending than they are to levy taxes for debt-paying.

There are certain other weaknesses in the public works proposal. The government spending may not be in the direction that will be likely to correct the maladjustments that have caused the recession. It may help to keep up certain prices and costs, particularly in the construction industries, which ought for the sake of balance in the economy to be lowered. Furthermore, there is the possibility that it may produce an artificial revival, based on the prop of governmental support, which will be followed by another collapse as soon as that prop is withdrawn. For these reasons, a public spending program must be directed with care, and it must be tapered off gradually as private business revives. Moreover, public works must not be

regarded as a complete solution to the problem of business depressions. They are an expedient to be used only in an emergency.

The Use of Unemployment Reserves.—In Chapter IX there was also a discussion of unemployment insurance as a means of providing for the support of labor during periods of unemployment. This, too, has some tendency to offset the deflationary influences of business contraction, for it helps to maintain the spending power of a great many consumers at a time when their expenditures would otherwise be much more drastically reduced. Whether or not this represents a net increase in the total volume of monetary expenditures in the economy depends on the source from which the unemployment benefits are derived. If funds which are paid to the unemployed are merely diverted from expenditures that would have been made anyway somewhere else in the system (as might be the case if the funds were derived from taxes levied at the time of payment, for instance), they have no expansionary effect. On the other hand, if the payments are drawn from previously accumulated hoards, there is a net increase in the monetary circulation which should help to check the deflationary forces of the depression. It has been suggested that unemployment insurance reserves might be used in such a way as to accomplish this. During prosperity, receipts of unemployment insurance funds would exceed disbursements; during depression, disbursements would exceed receipts. Let the excess receipts in the boom be deposited in the Federal Reserve Banks by the government, thus withdrawing funds from circulation; then let them be restored to circulation during depression, in the form of unemployment benefits. This procedure will help to check the inflationary tendencies of prosperity and the deflationary tendencies of depression.

The Need for Flexibility of Commodity Prices and Costs.—It has been shown that the uneven movement of commodity prices and costs, especially the lag of the latter behind the former, constitutes one of the maladjustments that leads to general business difficulties. If all prices, including the prices of the agents of production, would move more evenly, maladjustments from this source would be eliminated. It is a problem of promoting greater flexibility of prices, so that equilibrium adjustments can be reached more quickly and easily. Inflexibility of prices is due partly to monopolistic practices, in both the commodity and labor markets, partly to the slowness of rate-making procedure in regulated industries, and partly to various frictions in the economic process. The breaking up of monopolistic price practices, and a greater willingness to readjust rates on the part of rate-regulating authorities, would be helpful in this connection. In the case of one price, the bank-rate of interest, less attention to bank reserves, and more attention to the long-time investment market, seems to be needed, in order that the market rate can be kept in closer proximity to the equilibrium position. This calls for wise bank regulation.

The promotion of greater flexibility of wage rates presents a special problem. Wages should rise more rapidly during booms, and fall more rapidly during slumps, than they now do. The problem is largely one of securing the intelligent coöperation of unions and employers. Unions are prompt to press for increasing wages during periods of revival and prosperity, but they resist tenaciously any efforts to reduce wages during depressions, so that wages have sometimes risen too quickly during booms, and have not fallen sufficiently during slumps. Underconsumption theorists and labor sympathizers have rather encouraged this attitude. Labor has as much to gain as any group from business stability. Depressions are particularly disastrous to wage-earners, because of the widespread unemployment which they engender. Yet the stubborn resistance of organized labor to wage reductions prolongs and intensifies depressions. Labor leaders must learn that reductions in money wages, by reducing costs of production, will help to hasten recovery. Moreover, they should recognize that lower money wages at such times do not mean lower real wages, if wage rates are not reduced more than retail commodity prices. On the other hand, employers must recognize that if wages are to be flexible in a downward direction, they must also be flexible in an upward direction. Freedom to move both ways in response to market influences will make for greater stability.

On the whole, the outlook for more evenly adjusted prices and costs is not bright. The tendencies to rigidity in our economic system appear to be growing stronger as time goes on. The growth of monopolistic businesses, the increasing regulation of private enterprize by government, and the rising power of labor organizations all make for inflexibility. Therefore, it is all the more important to perfect means of directing our economic life which will check maladjustments of a serious character at their very inception, so that drastic readjustments will not become necessary. Whether this can be done within the capitalistic system of industry is one of the great questions which confronts our generation.

Recovery Efforts of the United States Government During the Great Depression.—In the Great Depression of 1930 to 1933 the United States government embarked upon a very extensive program designed to stimulate recovery. Four types of action were included in these efforts. First, there were measures of direct monetary inflation. Extensive power was granted the President to reduce the gold content of the dollar, to inject more silver into the monetary system, to issue more Federal Reserve Notes and other forms of paper money, and to place great quantities of government funds in circulation thru open market operations.[5] The powers granted were so sweeping that, had they all been used, we would have had a very severe inflation. The President (Franklin D. Roosevelt) announced it as his intention, however, to use these powers only so as to restore prices to their

[5] These measures will be more fully described in the next two chapters.

pre-depression level, and the inflation actually resorted to was, in fact, relatively moderate. The dollar was reduced in weight, and some of the other measures were put into effect, so that some expansion of money resulted. Bank credit, however, was slow to respond, so that the rise in prices produced was not excessive. Since a reasonable amount of inflation is probably needed at a time of business contraction, this part of the program was on the whole probably wise, altho deflation of the dollar and the injection of more silver into our currency was hardly necessary, and some of the inflationary legislation held dangerous possibilities, which may yet cause trouble.

Secondly, the federal government provided machinery for making loans to distressed debtors. Thru the Reconstruction Finance Corporation, government funds were advanced to solvent banks in urgent need of cash, to states needing money for the relief of the unemployed, and, under certain conditions, for the relief of corporations. This was supplemented by the creation of a Farm Loan Corporation and a Home Owners' Loan Corporation, to refinance farmers and home-owners, respectively, threatened with loss of their properties thru foreclosure proceedings. Such relief, under the circumstances, was certainly justified; and, by stopping the process of liquidation, it tended to hasten the advancement of business revival. This part of the program was also mildly inflationary, for the government securities issued to raise funds for these purposes were available as collateral for bank loans, and also for rediscounting with the Federal Reserve Banks. The general tendency of these measures was helpful.

Thirdly, the government embarked on the vast public works program described in Chapter IX. Several billion dollars were appropriated, out of loans, intended to provide work for the millions of people then unemployed. This is in line with the recommendation in an earlier paragraph for public works expenditures to offset the decrease in private spending during the time of depression. In this case, however, the public works program, not having been planned ahead of time, was gotten under way very slowly, so that recourse was had to local works projects scattered thruout the country which could be gotten under way more quickly.

Finally, efforts were made to increase the incomes of wage-earners and farmers, in the belief that this would start a revival of consumer spending, which would start a progressive process of general business recovery. This was intended to supplement the restoration of purchasing power to distressed debtors and unemployed workers provided by the relief and public works portions of the program. The Administration appeared to be definitely committed to the underconsumption theory of business depressions. It attributed the collapse, at least partly, to the lag of wages behind selling prices prior to 1929, leading to excessive profits in the urban industries generally, and to the lag of farm prices behind the prices of manufactured goods, which injured the farmers' purchasing power. Therefore, the Administration be-

lieved that, if wages and farm prices could be increased, balance would be restored in the economy and recovery would be assured. The principal measure relied upon to help the wage-earner, aside from the public works and local works projects already referred to, consisted of industrial codes adopted under the National Industry Recovery Act (NRA), by which employers agreed to increase wages and reduce hours of work, in return for certain privileges tending to limit price competition and also to limit output. The farmers were to be helped by the agricultural adjustment program, which provided a subsidy to the farmers for restricting their crop acreage, in the hope that the resulting curtailment of agricultural output would cause farm prices to rise. Both of these measures are described in greater detail elsewhere in this volume.[6] It will suffice here to point out, first, that an increase in wages in time of depression is more likely to retard recovery than to promote it, as we have already learned; and, second, that while restriction in overdeveloped industries is necessary to the restoration of balance, the general policy of curtailing output which was involved in these two measures was hardly likely to bring full employment and a full measure of business activity.

In general the recovery program above described appears to have brought some improvement, especially in the consumer goods industries. At least, a considerable measure of recovery did take place. This is clearly shown in the business cycle chart at the beginning of this chapter. Production, prices and wages went back to their 1929 levels in some branches of industry; but a large volume of unemployment continued, so that the government was forced to maintain its relief expenditures, and it kept on increasing its debt, rather than decreasing it. A further recession set in in 1937, the outcome of which is not clear at this writing (June 1938). Critics of this policy saw in the continued unemployment and this recession evidence that the policies were mistaken ones. They felt that the revival was based entirely on artificial stimulation which did not correct fundamental maladjustments. Furthermore, they were apprehensive at the mounting public debt, which they felt would undermine government credit, and at the potential monetary inflation. It is difficult to make an impartial appraisal. The depression was unusually severe, greater than any which had ever preceded it, so that the efforts at recovery had to work under most unfavorable conditions. They at least show the difficulty of lifting business out of a depression when it is once thoroly in it, and the need of more preventive measures exerted during periods of business expansion.

Summary

Business is subject to recurring cycles of prosperity, crisis (or recession), depression, and revival, ranging from three to five years in duration. These cycles can be measured statistically by appropriate indexes of business activity.

[6] See especially Chapters XIX and XXVI.

Business cycles have variously been attributed to: (1) sporadic occurrences external to the economic system; (2) psychological waves of optimism and pessimism, (3) monetary inflation and deflation, (4) overinvestment (that is, investment in excess of voluntary savings) financed by bank credit expansion, (5) underconsumption (or oversaving) resulting from inequality or from rising profits, (6) the fact that fluctuations in the demand for consumers' goods lead to magnified fluctuations in the demand for durable goods, (7) the lag of wages and other costs behind prices in periods of expansion. These theories are not mutually exclusive, but complementary. By combining them, we can trace the causal sequence of the cycle.

It may not be possible to eliminate business cycles in a capitalistic order of society, but measures of control can at least mitigate them. Among these measures are: control of money and credit so as to check inflation and deflation; government borrowing for public works during depressions; the depositing of unemployment reserves in Federal Reserve Banks during booms, to be released in depressions; promoting flexibility of prices and costs, especially of money wages. During the Great Depression, the American government made strenuous efforts to promote recovery thru direct monetary inflation, loans to debtors, public works programs, and the raising of wages and farm prices. Partial recovery did occur, but unemployment was not eliminated, and a recession set in again in 1937.

SUGGESTIONS FOR FURTHER READING

W. C. Mitchell's masterly analysis, *Business Cycle* (1913), has long been an outstanding work in this field. A new presentation by this author, embodying the results of later researches, has been published under the title *Business Cycles: The Problem and Its Setting* (1927). W. L. Thorp has compiled a useful historical account of business cycles thruout the world in *Business Annals* (1926). For a study of the statistical measurement of business cycles readers should consult Carl Snyder, *Business Cycles and Business Measurements* (1927).

The above books are largely descriptive in character. Theoretical works are too numerous to be listed with any completeness here. Very fair and comprehensive critical summaries of the various theories, with synthetic explanations built thereon, are to be found in G. von Haberler's *Prosperity and Depression* (Geneva, 1937), and A. H. Hansen's *Business-Cycle Theory* (1927). Haberler's work has been of great help in preparing the theoretical parts of this chapter.

On some of the problems of controlling business cycles see Paul H. Douglas's *Controlling Depressions* (1935), and A. H. Hansen's *Economic Stabilization in an Unbalanced World* (1932).

Wilhelm Röpke's *Crises and Cycles* (1936) is a compact and readable, yet comprehensive survey of the whole problem of business cycles, tinged with the viewpoint of an individualist.

CHAPTER XV

STABILIZING OUR MONETARY SYSTEM

A. Fluctuations in the Value of Money

Changes in the Price Level and Their Measurement.—The concept of an average or general level of prices has been made familiar to almost everyone by the remarkable changes in prices which have taken place within the last two decades. The prices of individual commodities and services are ever changing—some rising, others falling, scarcely any two of them moving in exactly the same way—but in their many variations a general trend upwards or downwards can nearly always be observed. Within comparatively recent years statisticians have found means of measuring this general trend by the use of index numbers. We shall not go into the technique of such measurement in detail, but we can obtain a general idea of it by taking the index of wholesale prices computed by the United States Bureau of Labor Statistics as an illustration. This Bureau now keeps a weekly or monthly record of the wholesale prices of 784 representative commodities. From this record it is able to ascertain the average price of each commodity in any given year. To obtain the index of all the prices for that year, what may be described as a "weighted aggregate" is worked out. A simple sum of the prices of the 784 articles would be unsatisfactory in making comparisons with other years, because a great change in the price of some relatively insignificant commodity might influence the total unduly. Each article is therefore given its due importance in the aggregate by "weighting" its price. That is, its average price for the year is multiplied by the estimated quantity of that article which was marketed in the year 1919, as shown by the census which was taken in the latter year. For instance, clover seed is a commodity very little used. Only 467,000 cwt. of it were marketed in 1919. Changes in its price should therefore be minimized in computing the index of prices. On the other hand, granulated sugar is a staple product of very great importance, 7,884,900,000 pounds of which were marketed in that year. Changes in the price of sugar should be given more weight in the index than those in the price of clover seed. By multiplying the two prices by the quantities given, this effect is obtained. The sum of all the prices, so weighted, gives the aggregate for the year. This aggregate can then be

compared with the similar aggregate of prices in some other year which has been selected as the basis for comparison. Most recent index numbers take some year shortly before or after the World War as the base, because the war period was one of abnormal price upheaval. The index number in any given year is shown as a certain percentage of the prices in the base year, which, in Figure 8, is 1926. For instance, the index for 1930, as there shown, was 86. This means that the aggregate of wholesale prices for that year, when divided by the aggregate for 1926, gave .86 as the quotient; and it shows that the level of prices in 1930 was 14 per cent lower than that of 1926.

A world comparison of index numbers shows that in every country the price level is subject to considerable fluctuation. At times the change may be gradual; again, it is erratic and extreme. Figure 8 shows in graphic form the movement of wholesale prices in this country from 1800 to 1937.[1] It will

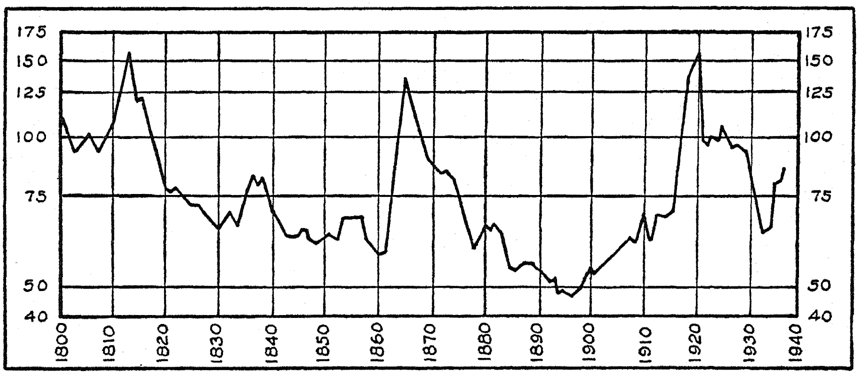

FIGURE 8. Wholesale Commodity Prices in the United States, 1800–1937. Base, 1926=100.

be observed that during this period there were three violent upward movements, followed by similarly violent declines. In the most recent of these, that which took place from 1910–1932, wholesale prices in this country rose to more than double their previous level and then fell precipitously (except for a fairly steady interval from 1921 to 1929) to a point about where they were before the World War. Even when prices are not behaving in so whimsical a manner, there is continual change going on, such as the gradual rise shown in the chart from 1896 to 1910, with lesser oscillations from year to year. A chart of prices for any other nation would show very similar changes. These facts indicate that price levels in the present economic order are very unstable.

[1] The figures are those of the U. S. Bureau of Labor Statistics.

An Unstable Price Level Means an Unstable Dollar.—These changes in the general level of prices show corresponding changes in the value, or purchasing power, of money. When prices are high, the value of money is low (for it will buy less in commodities), and *vice versa.* By money prices we indicate changes in the values of commodities, but if money itself changes in value, prices expressed in terms of it are quite unsatisfactory. Our dollar, instead of being a fixed unit of measurement, is a quite variable one. This lack of stability in our standard of value causes a great deal of inconvenience. Imagine us buying groceries, using as our standard of weight a flexible unit which varied from month to month and from year to year! In purchasing a pound of sugar we would never know just how much of it we would really receive, and there would be all sorts of opportunity for miscalculation and injustice, for at one time the grocer would be giving us less sugar to a pound than at another. Or, suppose we were accustomed to measuring cloth with a rubber yardstick, the length of which varied with the looseness or tightness with which it was stretched! In purchasing ten yards of material we would never know just how much we were getting. We are in exactly this situation when we deal in terms of dollars. When a wage-earner accepts employment at a wage of forty dollars per week, he has no way of knowing just what his real wage will be, for his forty dollars will not always purchase the same quantity of economic goods. If a man borrows a thousand dollars, agreeing to repay it at a later date, he cannot know just how great an obligation he has really assumed; for if the value of money changes, he will have to pay back more or less real purchasing power, as the case may be. In measuring weight, length, volume, temperature, the flow of electric current, the heat-giving capacity of foods, and the like, we no longer tolerate such uncertainty. We have devized invariable units, such as the pound, the foot, the cubic foot, the degree of temperature, the ampere, the calory, and other standards which are fixed and invariable. The lack of stability in our standard of value is equally intolerable and should be corrected.

The Disastrous Effects of Changing Price Levels.—We have already seen that fluctuations in the level of prices are closely associated with those serious disturbances of business activity which were described in the preceding chapter. In fact, some economists attribute the movements of business cycles almost exclusively to changes in the value of the dollar. But this is not the only evil which arises from instability of the price level. There are others sufficient to condemn the present monetary system.

One of the worst of these evils is the disastrous effect on debtors and creditors. Suppose that a corporation engaged in retail merchandising has borrowed $500,000 on bonds which mature in ten years. If the price level rises, the corporation's proceeds from the sale of its merchandize will be greatly increased, and it will require a smaller proportion of its total receipts to pay off

this loan than it had anticipated, giving its stockholders unexpected (and unearned) profits. The bondholders, on the other hand, will suffer a loss; for altho they get back just as much money as they loaned, the money is not worth as much, so that their real wealth has been decreased. This change in the value of money has robbed the bondholders to benefit the stockholders of the corporation. Had the price level fallen, the result would have been reversed. The corporation would have had difficulty in paying back the loan and might even have been forced into bankruptcy, while the bondholders would be receiving in actual purchasing power far more than they had loaned. The far-reaching extent of the gains and losses to debtors and creditors caused by a fluctuating price level will be realized if we consider the enormous number of persons who are either in a creditor or debtor position. When the price level rises, millions of debtors, such as enterprizers and stockholders (whose corporations are often doing business on borrowed funds), reap profits at the expense of millions of bondholders and other creditors. These creditors may be educational foundations, who now find the income from their endowments inadequate to meet the increased money expenses caused by a rising price level. They may be the recipients of insurance funds, painstakingly accumulated thru long years of saving to provide what was expected to be an adequate income for helpless widows and children, or to care for the declining years of old age. This rising price level is equivalent to confiscation of a part of the savings represented by these endowments, insurance policies, and so on. On the other hand, a falling price level makes it impossible for many debtors to meet their obligations. During the falling price level which accompanied the depression of 1930–1933, thousands of home owners and farmers lost their homes and farms because of their inability to meet the interest on their debts. These debts consisted of mortgages couched in the form of a fixed money sum, made at a time when prices, including the price of real estate, were high. When the fall in prices came, the money incomes of the mortgagors fell with them, until they reached a point where it was no longer possible to pay the interest on these mortgages. Foreclosures followed and the wealth of the unfortunate debtors passed into other hands. Falling prices also meant the bankruptcy of many business firms, with consequent stoppage of industrial activity and the creation of unemployment.

An unstable price level also has far-reaching effects upon the prosperity of wage-earners. The labor market is sluggish, and money wages cannot be adjusted immediately to every change in the general level of prices. This is especially true where wages are fixed by collective agreements which have several years to run. If prices rise and wages do not, the laborer loses; if they fall, he gains. It used to be said that rising prices injured wage-earners, because it was believed that money wages did not usually keep pace with the declining value of the dollar. This is probably

no longer true in those trades which are well organized into unions, for in periods of rising prices the unions are able to obtain successive increases, so that wages may rise at even a faster rate than other prices. Falling prices, however, are nearly always certain to bring disaster upon the laboring class, because they lead to unemployment. For those laborers who continue to be employed during periods of falling prices, however, there is likely to be some gain, for their wages will not usually decline as rapidly as commodity prices.

Rising price levels usually lead to increasing business profits, for business enterprizers finance their operations very largely on money loans, the amount of which remains fixed, while the selling prices of their merchandize increase. They also gain from the fact that, as prices keep going up, the money value of the goods which they have purchased is continually rising so long as it is in their hands. By laying in stores of materials or merchandize in advance, and selling it later when prices have risen, they reap a corresponding gain. When prices fall, however, the effects upon business men are very disastrous, for now the reverse of the conditions just described takes place. The prices of goods in producers' hands fall and there is loss on all stocks laid in in anticipation of future sales, while money debts remain as great as before and money incomes from business operations are declining. It is these effects on the profits of business men which make the fluctuating price level an important cause contributing to business cycles.

A Qualification.—The above argument applies only to price level changes caused by expansion or contraction of money. Where, the flow of currency remaining unchanged, a movement of the price level is brought about by changes in the "real" or "physical" costs of industry, the relationships between debtors, creditors, enterprizers and wage-earners will not be generally disturbed. In progressive economies, technical progress tends to bring about a more or less continual increase in output, relative to the amounts of productive factors (land, labor and instrumental capital) employed. This will permit a general lowering of prices without any decrease in money rents, money wages, money interest, debt reduction, and the like, paid out by enterprizers. So long as prices fall no faster than such costs, then, enterprizers will not be injured; for, altho they sell their products at a lower price per unit, they sell a greater amount of them than before, and the total of their money receipts, in general, will be as large as ever, for the recipients of the money income stream will exchange it all for goods of one kind or another, passing it thru enterprizers' hands, as heretofore. Neither will the other classes in the economy suffer, because, under the conditions assumed, their money incomes will be no less than they were previously. On the contrary, everyone will benefit by the fall in prices, for they can buy more goods than formerly. In this way all share in the generally lower costs made possible by improved

industrial methods. We shall have occasion to refer to this reasoning later in this chapter, when we consider the proposals of those who favor a "neutral" money policy.

Monetary Inflation.—The evils of an unstable currency are most flagrant during periods of extreme monetary inflation. By inflation we mean any increase in purchasing power not offset by an equal increase in the volume of trade. There is always in every country a group of people, such as debtors, who gain by rising prices, and who, therefore, favor a "cheap money" policy. "Cheap money" means abundant money,—that is, money of low purchasing power, reflected in a high level of prices. A policy of inflation is most likely to be adopted, however, in time of war, when the financial resources of governments are strained to the limit. Wars are exceedingly expensive, and it is very difficult to raise enough revenue by taxation to finance them. It is much easier to print the money with which to pay the government's bills for war supplies, for this money is readily accepted by the people and passes into general circulation. As the circulation of money increases, the price level begins to rise—for money is like other things, the more there is of it the less it is worth; consequently, it takes more to buy a given quantity of goods when money is plentiful. Or, to put it another way, when people have more money in their possession, their money demands for commodities increase and the prices of the latter rise as a result.

If the paper-money issues of a period of inflation are small, the resulting disturbances need not be very serious. But if a war is to be fought, its expenses are likely to be terrific, and the government finds itself under pressure to issue its notes in ever increasing quantities. In fact, it is soon enmeshed in the maze of a vicious circle, for, as prices rise, the purchasing power of its paper-money issues declines and its tax receipts will likewise provide less real income. Hence, it is forced to issue still larger quantities in order to make up for the deficiency. This pushes the price level higher and higher, making still larger paper-money issues inevitable, until the circulating medium is swelled to an enormous size.

Excessive inflation of this sort took place in many European countries during and after the World War. Beginning with small issues, the governments soon found themselves in the vicious circle of inflation. New issues were put out in increasing amounts until the monetary circulation rose to incredible figures. Even such financially strong nations as Great Britain and the United States did not escape this tendency, while in Germany and Russia the inflation exceeded all bounds. The following table, showing the paper-money circulation in a number of countries before and after the war, gives some idea of how extreme was the situation:

Paper Currency Issues in Certain Countries, 1914 and 1923[2]

Country	Monetary Unit	Note Circulation 1914	Note Circulation 1923
		(000,000 *Omitted*)	
Austria	Crown	5,138	4,113,000
Belgium	Franc	934	6,902
France	Franc	5,812	37,055
Germany	Mark	2,014	3,871,788
Italy	Lire	1,557	13,405
Russia	Ruble	1,590	450,000,000
United Kingdom	Pound	29	401
United States	Dollar	1,056	3,266

How Inflation Confiscates Capital.—We can perhaps appreciate the enormity of the catastrophe involved in such inflation by considering how the weath of thousands of people was completely wiped out by it. Let us imagine the situation in Germany. Thousands of investors had put their savings into mortgages on real estate, into the bonds of corporations, and into the bonds of the German government itself. In many cases these investments represented the entire fortunes of the investors. They were debts contracted in terms of German marks, and representing, at the time of the loans, large quantities of wealth. Then marks began to depreciate and prices began to soar. When prices had increased so many times that every commodity sold brought into the seller's hands hundreds of times as many marks as it formerly had, it was a comparatively simple matter for the debtor corporations to pay off their bond issues and mortgages in the depreciated currency. It was as tho a debt of thousands of dollars could be paid off for a few cents. In this way the debts of many corporations were practically wiped out. The investors received as many marks as they had originally invested, to be sure; but these marks were practically worthless. The fortunes of the investors were gone. They had been defrauded of their wealth by the depreciation of the currency. Even creditors of the German government, who bought bonds in good faith, found their value shrinking and shrinking until they became so much worthless paper.

The Problems of Deflation.—The results of excessive inflation are so obviously disastrous that, sooner or later, governments come to realize that it must be stopped and a sound and stable currency restored. Then arises a question· as to what is the best method of bringing about such restoration. In the opinion of many, the only sound and ethical course for a government to pursue is to redeem its paper money issues in undepreciated money (usually gold). Government notes are nominal promises to pay

[2] The figures are those of O. P. Austin, statistician for the National City Bank of New York, as given in the bank's Monthly Letter for April, 1923.

such money, and failure to redeem these promises is regarded as an evidence of bad faith on the part of the government. Moreover, it is detrimental to the government's credit. If the inflation has not been very severe, this may be the wisest course. The United States succeeded in redeeming its currency, dollar for dollar after the Civil War, and this greatly strengthened its credit and the world's confidence in the integrity of our government. England was able to do the same thing with its currency after the World War, tho not without some disturbances to business occasioned by the accompanying deflation.

If inflation has been very great, however, full redemption of the currency (if possible—which it often is not) would be as distastrous as the inflation which preceded it, for redemption means deflating the currency to the same extent as it has previously been inflated. Since the notes are nominally promises to pay standard gold money, complete redemption is only possible by calling in the notes which have been overissued and paying out sound money, backed by gold, and equal to the nominal value of the notes, in exchange for them. The retirement of the depreciated money reduces the total volume of purchasing power and brings about a fall in prices to somewhere near their original level. Such a fall in prices is just as undesirable as the rise which precedes it.

Under such circumstances, some form of repudiating the paper money must take place. Two methods are possible. The discredited money may be outlawed entirely, allowing a new currency, backed by adequate gold reserves, to take its place. The usual procedure, however, is to redeem the money, not at its face value, but at something like its depreciated value in terms of gold. The American government, after the Revolution, redeemed the paper money issued by the Continental Congress at about one cent on the dollar.

Such a stigma is attached to the term repudiation, however, that in recent monetary reconstruction policies a softer word, devaluation, has been used in its place. The term implies that the money is not repudiated, but is merely revalued in terms of gold, at somewhere near its actual market worth. In most of the European countries this was accomplished by establishing a new gold-standard money unit with a new name, and then setting up a fixed ratio of exchange between the two moneys thus circulating side by side. In time this permitted the governments to replace all of the depreciated currency with the new money at the ratio so established. Devaluation by such methods accomplishes the transition from a discredited to a sound currency with a minimum of disturbance.

Before the restoration of a sound currency is possible, the government must balance its budget; that is, it must succeed in making its revenues from taxes, loans, or other legitimate sources equal its expenditures. If it cannot do this, it has no recourse but to go on printing money with which to pay

its bills. Hence, the transition from a time of inflation to one of stability is a difficult period, calling for sound statesmanship and heroic measures.

B. Some Problems of Monetary Stabilization

Why Money Fluctuates in Value.—We cannot hope to correct our unstable dollar until we first understand the causes upon which the value of money depends. Like other values, it is very largely a matter of demand and supply—the demand for and supply of money. The demand for money consists of all the goods which are offered in exchange for it. The supply is made up of all the means of payment actually used in the purchase of goods. The value of money, therefore, depends upon the ratio between the total purchasing power available and the number of goods for which this purchasing power is to be exchanged. But this simple formula is not enough. We must go into greater detail in order to see just what it is that makes up the volume of purchasing power, and what constitutes the volume of goods offered in exchange for it.

Goods are more often purchased with some form of credit than with actual money itself. The volume of purchasing power, therefore, is made up of both money and circulating credit. Money includes not only gold and silver coin and bullion, but bank notes, government notes, or any other forms of paper money that may be in circulation. Circulating credit consists mainly of bank deposits subject to check. Some of the money and credit may be used little or none, however, while another portion of it may be used a great deal. Most of our gold and silver coin and bullion is securely locked up in government strongholds and does not circulate in exchange. So long as this money is not actually in circulation, it cannot enter into the determination of prices. Some bank deposits subject to check may be carried on the books of the banks, but unless checks are actually drawn against them, they do not enter into the price-determining process. On the other hand, those dollars and bank deposits which actively circulate may be used over and over again in the course of a few weeks or months. Every time they are used they help to determine a price. An accurate indication of the total supply of purchasing power which really enters into the determination of the price level, therefore, consists of (a) the volume of money, (b) the volume of circulating credit, and (c) the rapidity of circulation (or turnover) thereof.

The demand for money, we have seen, consists of all the goods which are offered in exchange for it. These goods include not only physical commodities, but the services of laborers, the making of loans, the renting of real estate, and so on. In fact, every time there is a business transaction of any kind in which any commodity or service is offered in exchange for any form of money payment, the price level is affected thereby. Further-

more, if a given article passes thru several hands, as when it is sold by a manufacturer to a wholesaler, by a wholesaler to retailer, and by a retailer to a final consumer, a price is established at each such transfer. It therefore enters into the price level several times. We find, then, that the demand for money consists of the total number of units of commodities and services that enter into exchange; or we may say, simply, the total number of exchange transactions that take place within a given period of time.

The relation between these various elements is most conveniently expressed in an algebraic formula, known as the equation of exchange. This equation may be written as follows: $P = \frac{MV+M'V'}{T}$. Here P stands for the average, or general level, of prices. M represents the total stock of money, either in active circulation or in bank or government vaults. V indicates the velocity of circulation, or rate of turnover, of this money.[3] M′ stands for circulating credit. V′ is the velocity of circulation, or rate of transfer, of this credit from person to person and from bank to bank. T is the total volume of trade, or the number of transfers of commodities and services entering into exchange. It will be observed that the value of P (the general level of prices) depends upon the ratio between the numerator and denominator of the fraction with which it is equated. The numerator of the fraction represents purchasing power; the denominator represents goods. Any increase in purchasing power raises the value of the numerator and increases the magnitude of P. Any increase in the volume of trade, on the other hand, raises the value of the denominator and decreases that of P. So the equation is just another way of stating the truth, that the general level of prices varies directly with the purchasing power and inversely with the number of goods entering into exchange.

The General Principle of Stabilization.—So far as those violent fluctuations of the price level which arise from excessive issues of fiat money and their subsequent repudiation or devaluation are concerned, the remedy is clear enough. Governments must refrain from such reckless methods of finance and learn to pay their expenses out of revenues derived from taxes or from justifiable loans. More will be said on these questions in Chapter XXIII. But we must not be deluded by the thought that this will be easy of accomplishment. Sound government financing depends on the wisdom of officials and their willingness to avoid the issue of fiat currency. In times of peace this may be attained, but it is almost too much to expect in time of war. Wars cost so much money that the burden of taxation required to finance them by ordinary means is more than the people, in most cases, would be willing to bear. So long as wars continue to be fought, therefore, we must expect them to be financed by some measure of inflation.

[3] The velocity of that money which is held in the vaults as reserve is, of course, zero, and hence this money has no direct effect upon the value of P at all.

However, the problem of a fluctuating price level is not only one of wartime inflation and deflation. In times of peace, prices go up and down greatly, both with the phases of the business cycle, and over longer periods, such as the slow upward trend from 1895 to 1914. How to correct these cyclical and secular movements is the problem to which the remainder of this chapter will be devoted. It is clear from our analysis of the equation of exchange that we could keep the value of P stable, if we could maintain a constant ratio between the volume and velocity of our currency, on the one hand, and the volume of trade on the other. To regulate the latter, we would have to control the entire process of production—a task too vast for the present; but some economists believe it is both desirable and feasible to adjust the supply of money and credit to the output of industry in such a way as to stabilize the price level. Their proposals are thus monetary in character.

The Controversy over Price Level Stabilization.—It should be noted that economists are not unanimous in advocating complete stabilization of the general price level. While there is general agreement that something can and should be done in matters of monetary policy to achieve a greater measure of business stability than has prevailed hitherto, some competent authorities doubt the wisdom of attempting to keep prices on an even level. They point out that this would involve manipulation of the currency by political agencies, whose interference in monetary matters hitherto has more often been harmful than beneficial. They doubt, furthermore, whether the monetary controls at the disposal of the regulatory authorities would be effective enough to accomplish the proposed purpose. There are certain other difficulties, presently to be discussed. These objections have been stressed particularly by an influential group of American monetary experts, known as The Economists' National Committee on Monetary Policy (an entirely unofficial and voluntary organization), which has given considerable publicity to its views. However, there is an impressive group of able economists who advocate some form or other of price level stabilization.

The Neutral Money Proposal.—Among the latter there is a school of theorists who favor a policy of monetary "neutrality," which would prevent changes in the price level arising from monetary causes, but would permit those which result from changes in the "real," or physical, costs of production. To achieve this they would stabilize, not the average of commodity prices, but the average of all money incomes (wages, interest, and land rents) paid to the agents of production. This means that the items MV and M′ V′ would be so controlled as to remain substantially unchanged in magnitude, except that they would be allowed to expand gradually in direct proportion to the increase of population and the growth of capital. There might also have to be some contraction in these items to offset any decrease in the number of exchanges (T) in the economy, caused by the vertical in-

tegration of industry. Such integration, by eliminating transactions between formerly separate concerns in the successive stages of industry, would otherwise have a somewhat inflationary effect on the price level. The neutral money theorists object to an absolutely stable commodity price level because, with costs being gradually reduced by technological progress, there will be an inflation of profits, with unbalancing effects upon the economy, unless prices are allowed to fall correspondingly. With their plan in effect, the monetary circulation would not be increased to offset any increase in production occasioned by technical progress, so that the price level would gradually decline along with falling costs. It has been shown in a previous paragraph that this would work no hardship on enterprizers, whose incomes would be kept up by the steadily increasing quantity of goods they would sell, and all classes in the economy would experience an increase in real incomes, for the average of their money incomes would remain unchanged, while goods would be cheaper than formerly. The means adopted to control MV and M′ V′ would be similar to those to be described in Part C of this chapter.

While the neutral money scheme would not keep commodity prices absolutely stable, it would prevent those erratic fluctuations in them which have hitherto been caused by monetary factors. The plan has been criticized on the ground that its tendency to produce a gradually falling price level would have a depressing effect upon business activity, but we have already advanced reasons for believing that this would not be the case. All things considered, there is much merit in the neutral money proposal.

A Suitable Index Number.—We must have some measure of the general level of prices which is sufficiently accurate to provide a guide for stabilization. Most index numbers measure only commodity prices, such as the wholesale price index described at the beginning of this chapter. But money is used to purchase not only commodities at wholesale but also those at retail, and for such purposes as employing the services of labor, the renting of real estate, and other more or less intangible things. The value of money consists of what it will buy, on the average, of everything for which it is used. To construct an index number which will truly represent this is not an easy task, but progress in this direction is being made. Fortunately, we need not wait for a perfect index number before embarking upon a plan of stabilization, for a program based on one that is even approximately correct would be a better guide than none at all, and such an index number would suffice as a standard by which to correct the more serious fluctuations in the value of the dollar.

At What Level Should Prices be Stabilized?—A second question that arises is, at what level should we seek to stabilize our prices? Many persons argue that, after a period of inflation or deflation, the prices should be restored to the old level which existed prior to such movements. They

believe that this would remedy some of the injustices which have been done to debtors or creditors by falling or rising prices. There is also the feeling that the new level of prices prevailing is an abnormal one, and the old level preceding the change is the norm which should be reëstablished.

On this theory, President Roosevelt stated (in his radio addresses of May 7 and October 22, 1933) that he intended to raise commodity prices "to such an extent that those who have borrowed money will, on the average, be able to repay that money in the same kind of money which they borrowed," and that "When we have restored the price level, we shall seek to establish and maintain a dollar which will not change its purchasing and debt-paying power during the succeeding generation." This policy was sometimes referred to as "reflation."

As a step toward this end he first began purchasing gold at home and abroad at prices considerably above the mint price which had long prevailed in this country. This was interpreted as a threat to depreciate our currency, which became a reality when, in 1934, our gold dollar was reduced to 59 per cent of its former weight (from 25.8 grains nine-tenths fine to 15 5/28 grains). This dollar devaluation released some forty per cent of our gold reserves from the banks. The government confiscated this to set up a "stabilization fund" for manipulating foreign exchange, issuing new money, or other (undisclosed) purposes. These operations, and the issuing of silver certificates to be described in a later paragraph, were an inflationary depreciation of our currency, tending to raise prices sooner or later. But there was nothing in the program to ensure that prices would go to the supposedly "normal" level, nor did the President explain how he expected to keep them there, once they had arrived.

There is something to be said for a policy of restoring prices to a preëxisting level, provided deflation or inflation has not gone so far that the majority of prices have become adjusted to the new plane. But if such an adjustment has been attained, or approximately so, such a policy would be unwise. Every monetary disturbance which forces the price level either upward or downward is undesirable. It is impossible to correct the injustices caused by a rising or falling price level without creating new injustices in their place. It is foolish to bring about new disturbances in business relationships in an effort to do so. Moreover, we must realize that there is no normal level of prices. It is changes in the price level, other than those occasioned by changing costs, which bring disaster. The best policy, therefore, so far as internal trade is concerned, is to stabilize prices as nearly as possible at the level prevailing at the time stabilization is to be undertaken.

Internal Price Levels and Foreign Exchange Rates.—Another problem in any program for stabilizing the price level within a given country has to do with the relation between its price level and that of other countries with which it has trade dealings, as reflected in rates of exchange. If,

for instance, we keep the price level in the United States stable, while that of some other countries, such as Great Britain, is rising, the British pound will fall in value relatively to the dollar. British exchange will then be quoted at a discount in this country, and American exchange will be quoted at a premium in Great Britain. This would reduce the exports of American goods to England, because our goods would be relatively dearer to the British than they formerly were. On the contrary, if the British price level were falling, while ours remained stable, exactly the opposite effects would result. Sterling exchange would be dear in terms of dollars, American exports to England would be stimulated, and British exports to the United States would be curtailed. These effects would not ensue if the rates of exchange moved in exact correspondence with the change in price levels, but in the short run there would be some disparity. Consequently, unless the principal commercial nations would agree to a concerted program of price level stabilization, attempts to fix the value of money in any one or more of them might cause repeated disturbances in their foreign trade relations, and these disturbances would have unfavorable repercussions on domestic industry as well.

It has been argued that these disturbances would defeat any attempt on the part of one nation to stabilize its own price level. This argument probably exaggerates the influence of foreign trade movements. It seems likely that the manipulation of a nation's currency (including both money and credit), along the lines indicated in some of the proposals presently to be set forth, could be made great enough to offset the disturbances in the price level caused by the tendencies described.

The relative importance of foreign exchange rates and the internal price level, however, will depend upon the size of a country's foreign trade as compared with its domestic industry. Those countries, such as Great Britain, which are largely dependent upon their foreign trade, might suffer more from a policy of internal price stabilization than if they allowed their price levels to fluctuate.

But where a country's foreign trade is of minor importance, stability of the internal price level is more to be desired than stability of its foreign exchange rates. The United States is in such a position. Our foreign commerce does not amount to more than 10 per cent of our total industry. The disturbances caused by fluctuations in the value of the dollar abroad, therefore, are less serious to us than fluctuations in the internal price level. Hence, it would be wise policy for us to embark on a program of stabilizing the price level within our borders, without waiting for the rest of the world to do likewise.

The Disturbance of Inter-Price Relationships.—We have seen that any program to prevent fluctuations in the general level of prices requires an adjustment of the supply of money and credit to the output of

industry. This means that if we wish to check an incipient rise in prices, we must withdraw some currency from circulation. Likewise, if we wish to correct an incipient fall in prices, we must inject more currency into circulation. Now, the general level of prices which we are discussing is, after all, a fictitious thing, a mere statistical average of a great many individual prices. These prices are mutually related in such a way that changes in some of them tend to bring about changes in many of the others. If we change the quantity of currency in circulation, we cannot expect it to affect all prices equally and at the same time, for if we put more money into circulation or take some out, it must affect some prices before it does the others. For instance, if we are trying to prevent a fall in prices by expanding our currency thru money issued by the government, it will first raise the prices of those commodities and services which the government buys, and this will throw them out of adjustment with other prices. If the expansion takes the form of additional bank credit, it is most likely to get into the hands of business men, who will use it for the purchase of capital equipment, thereby disturbing the relation between the prices of producers' goods and consumers' goods. A contraction of bank credit would have the opposite effect. These difficulties would not appear in the neutral money system, an important advantage of which is that it would leave the flow of money substantially unchanged and, so, would not interfere with the free movement of individual prices.

It is the view of the present writers that such disturbances of inter-price relationships would be serious if the volume of changes in the currency necessary to effect stabilization of the price level were large, relative to the total volume of money and credit in circulation. However, once the program was well under way, the changes in currency necessary to keep prices on an even keel ought to be slight, for if we at once initiate measures to correct a tendency of prices to rise or fall before they have reached significant proportions, homeopathic doses of the remedy ought to suffice to do the work. If this is true, the disturbances of inter-price relationships would be much smaller and much less disastrous than the evils attendant upon the wide fluctuations in the general level of prices which now take place. Hence, this difficulty does not seem serious enough to defeat the objects of a stabilization program.

C. Proposals for a Stabilized Currency

A Multiple Standard of Debts.—Let us, then, proceed to consider some of the measures for stabilizing our monetary system which have been suggested. It has been proposed that the injustices between debtors and creditors which result from changing price levels can be corrected without changing our monetary system. At present it is the practice for a debtor to repay his creditors as many dollars as were loaned to him, with interest.

It is now suggested that, instead of doing this, he should pay back *as much real purchasing power* as he borrowed. This could be done by making the principal of the loan vary with some officially established index number of prices. If a corporation issued a one thousand dollar bond in 1925, payable ten years later, and the price level rose 10 per cent during that period, it should pay to the bondholder in 1935 eleven hundred dollars, in order to return to him as much purchasing power as was represented by the original loan. On the other hand, if prices fell, a creditor would receive less money than he invested. At least one case is on record where such bonds were actually issued.[4] If the reader has followed the analysis of the injustice to debtors and creditors caused by unstable prices, he will see that this multiple standard of debts is an arrangement equitable to both parties. As an emergency measure it is to be commended, so long as fluctuations in the level of prices continue. Had it been in effect during the depression of 1930–1933, it would have saved thousands of farm and home-owners the loss of their properties thru mortgage foreclosures, without injustice to the mortgagees. However, the plan is at best a makeshift, for it corrects only one of the difficulties which result from changing price levels; and it permits the real source of the evil—the unstable dollar—to continue. A more radical remedy must therefore be sought.

International Bimetallism.—From time to time it has been urged that international bimetallism would render the price level more stable than a monetary system based exclusively upon gold. Under bimetallism both gold and silver are made standard money, and the holder of either metal can have them coined in unlimited amounts at the government mints. It has been shown that no one nation by itself can successfully maintain a bimetallic currency, because of the operation of Gresham's law. For the sake of uniform coinage it is necessary to prescribe a fixed weight for both the gold and silver coins, thereby establishing an unchangeable mint ratio for the metals when used as money. But the market ratio of these two metals continually fluctuates, for it is not to be expected that the prices of gold and silver will always move exactly together. Consequently, there is a discrepancy between the value of the two metals as commodities (the market ratio) and the value artificially set upon them as money (the mint ratio). Every time the market ratio deviates from the mint ratio either gold or silver is overvalued, and the overvalued money drives the undervalued one out of circulation. Then either gold or silver will become the standard coin in fact, and the other metal will disappear from the monetary system.

It has been suggested, however, that, if bimetallism could be established

[4] Rand Kardex Co., Inc., 7 per cent 30-year stabilized debenture bonds, due July 1955. These bonds stipulated that both the principal and interest thereon would vary in exact ratio with the wholesale price index of the United States Bureau of Labor Statistics.

in all of the most important countries simultaneously by international agreement, this difficulty would not arise. When one country attempts to maintain bimetallism alone, a large part of the undervalued metal flows to other countries where bimetallism is not maintained. If all countries had the system, however, this expulsion of the undervalued metal could not take place. The only avenue of escape for it would be to employ it in the arts. But as it was withdrawn from circulation and put to industrial use, the value of money would rise as a result of the decrease in the supply of it, while the value of the metal in the arts would fall because its quantity was increasing. This would go on until the value of the metal in its two uses became equal. In this way the market ratio would adjust itself to the mint ratio, and a certain amount of both moneys would remain in circulation. It is argued that if such an international system could be maintained, the price level would be more stable, because the two metals would not be likely to change in value to the same extent at the same time. If either one moved up or down, its effect upon prices would be offset by the greater stability of the other. There is merit to this reasoning, but experience proves that if we had had bimetallism for the past thirty or forty years, our price level would have shown more extreme changes than it did, because the value of silver fluctuated upward and downward much more than did gold, and its presence in the monetary system would have been a disturbing, not a stabilizing influence. However, this might not be the case in the long run, for there is reason to believe that the value of gold will be less stable in the future than it has been in the past.

Bimetallism had become a dead issue following the definite adoption of the gold standard by most countries of the world until the disturbed monetary conditions brought about by the World War. During this conflict a large part of the world's monetary gold reserves flowed into the United States in payment of foreign debts to this country, and there were reasons to believe that the resumption of the gold standard in Europe would be difficult. Hence, there was renewed agitation for the adoption of some form of international bimetallism. Again, in the United States, during the depression of 1930–1933 there was renewed pressure for the monetization of silver, emanating from silver interests who were trying to raise the demand for silver (the price of which was very low), and from inflationists who sought a general rise in prices thru increased money issues. In 1934 a bill was forced thru Congress directing the Treasury to increase our stocks of monetary silver until they should equal 25 per cent of our total specie reserves. Purchases of silver and the issuing of overvalued silver certificates to carry out this program were begun soon after. While this is not bimetallism, it does indicate a tendency in that direction.

The Compensated Dollar.—One of the most interesting and widely discussed suggestions for the attainment of a stable price level is embodied

in the compensated dollar plan. Its leading advocate has been Professor Irving Fisher of Yale University. Under this plan, a gold dollar would continue to be the standard money of the United States, but instead of being fixed in weight it would be fixed in purchasing power. The present dollar, containing a fixed amount of gold, would be replaced by a dollar the weight of which would be changed from month to month in accordance with an official index number. If the index number for any month showed an increase in the price level, the weight of the dollar in that month would be increased by a small amount, never exceeding one per cent. If the index number showed a decline in prices, the weight of the dollar would be decreased. In order to avoid the absurdity of having gold coins of different weight circulating side by side, no gold would actually be used as money. There would be free admission of gold into the monetary system, but those who brought it to the mint would receive gold certificates instead of coins. Likewise, anyone who held gold certificates could convert them into gold bullion by presenting them to the United States Treasury for redemption. The amount of gold represented by each certificate would vary in accordance with the standard weight fixed for the dollar from month to month. This substitution of gold certificates for gold coin involves very little departure from our present system, for very little gold is used as money today. Most of it is held in government strongholds, and paper money circulates in its place. There are other details to the plan, designed to prevent speculation in gold at the expense of the government by persons anticipating an approaching change in the gold content of the dollar.

Stabilization would actually be accomplished by a change in the number of dollars in circulation, in this way: If the quantity of gold in the dollar were increased, fewer gold certificates could be circulated against the government's gold reserves than before, so that some of them would have to be retired. If the weight of the dollar were reduced, the available gold reserves would make possible a larger circulation of paper, and more certificates would be issued. In this way any change in the general level of prices would be corrected by a compensating change in the number of dollars before it had proceeded very far. This plan, then, proposes to stabilize the price level by controlling M in the equation of exchange.

This leads us to question seriously whether the compensated dollar, by itself, would fully accomplish its purpose. We know that the price level depends not alone upon the quantity of money, but also on its velocity of circulation and upon the quantity and velocity of credit. The compensated dollar plan rests upon the assumption that velocity is an unimportant factor and that, inasmuch as credit is based upon and limited by available gold reserves, any change in the number of gold dollars must be reflected in a corresponding change in credit currency. This may be true in the long run, but it is certain that for short periods credit may expand or contract without

corresponding change in the volume of money or of gold. Hence, additional measures designed to correct fluctuations in the volume of credit would be necessary.

The Control of Bank Credit.—Circulating bank credit is so important a factor in the price level that some means of controlling it will have to be employed if fluctuations in the price level are to be prevented. The credit structure of most countries is dominated by some central banking authority (such as the Board of Governors of our Federal Reserve System), which exerts considerable influence over banking policies. If it is so disposed, this authority can use its powers so as to help stabilize the price level. Among the devices which are available for this purpose are, control of the rediscount rate, of open market operations, and of reserve requirements. Suppose that it is desired to check an incipient rise in the price level. The banking authorities can raise the rate of rediscount at which central banks will make loans to other banks, thereby discouraging credit expansion; they can sell securities in the open market and hoard the funds received in payment therefor, thus causing some shrinkage of the monetary circulation; or, they can raise the reserve requirements to which the banks must conform, thereby limiting their lending power. If an incipient fall of prices is to be forestalled, they can lower the rediscount rate, thus making loans cheaper to borrowers; they can inject funds into the market by purchasing securities and paying cash therefor; or, they can lower the reserve requirements, thus relaxing the limits to bank credit expansion. All of these devices are now in common use in this country, but they have not hitherto been generally used to stabilize the price level.

Some critics doubt whether they could be used effectively to attain such an objective. Credit is an intangible thing, so dependent on the temper of the business community, and on international monetary movements which are difficult to control, they argue, that mechanical devices of this sort are of limited usefulness. As to this, it seems fairly certain that the banking authorities have ample power to check an inflationary rise of prices if they are resolved to do so, for they can make the expansion of credit very difficult; but it is not so clear that they can prevent prices from falling, for, while they can make credit easy and cheap to obtain, they cannot compel business men to borrow if they are not in a mood for it. It may be necessary, therefore, to supplement the above measures by government borrowing and spending in times of depression, as suggested in the preceding chapter.

A more drastic procedure has recently been suggested. It is that the power to expand and contract credit be taken away from the banks entirely, and lodged with the government, which could then control credit to its liking. The banks would become mere retailers of credit, supplied to them by the government. This is known as the 100 per cent reserve plan. It will be described, along with the other measures just referred to, in the following chapter.

The Suggested Abandonment of the Gold Standard.—Within recent years some authorities have begun to question whether the maintenance of the gold standard is any longer necessary or desirable. This attitude is based on both experience and theoretical considerations.

It is granted that the gold standard has its advantages. In early times, when only metallic money was generally used, gold was the most suitable metal for the purpose. History shows that it gave us a more stable money than silver would have done, and it is far superior to fiat money, when the latter is issued indiscriminately to meet the exigencies of political expediency. Also, the general use of gold in most of the world caused the price levels in all gold standard countries to move approximately in unison, which is an advantage for the smooth carrying on of international trade. Gold shipments afford a very satisfactory way of settling international balances. Finally, where there is strong enough sentiment for maintaining the gold standard inviolate, industry is protected from inflationists and "cheap money" politics.

On the other hand, gold has little actual use as money today. It has been almost completely replaced by paper substitutes, the gold being merely kept as a reserve to secure the paper. In many countries (joined by our own in 1933) the paper is inconvertible, or convertible only at the will of the government. Where the circulating medium is regulated by the size of the gold reserves, the consequences may be far from satisfactory. An inflow of gold may lead to dangerous inflation. This happened when Europe sent us great quantities of the yellow metal to pay for purchases here during and after the World War. Our surplus reserves of gold helped to support the rapid rise of prices that reached its peak in 1920, and led to an eventual collapse. Conversely, an outflow of gold payments may cause deflation and loss of confidence. This has been the recent experience of some European countries. Moreover, it is expensive to keep millions invested in gold just to lie in storage. Finally, the relatively stable value of gold in the past is largely accidental. Gold production ran roughly parallel to the output of other commodities, keeping the ratio of currency to trade (the numerator and denominator of the equation of exchange) fairly constant. But there is no assurance that even this rough stability will continue. Some students of the problem believe that there is little likelihood of much further steady increase in the world's output of gold, while continued growth of production in other lines is to be expected. The rigid maintenance of a gold standard under these conditions might lead to a long period of falling prices, with a depressing effect upon business. On the other hand, if science should discover ways of transmuting other metals into gold cheaply, there might be a sudden increase in the world's gold supply which would usher in a period of inflation. Finally, one may ask why it is necessary or appropriate to tie our monetary system to any one commodity whose value is

bound to fluctuate. Even tho we may correct such fluctuations by compensated dollars or other devices, would it not be better to tackle the problem directly, by setting up a new monetary unit whose value is independent of any one commodity? This is what some writers are now proposing.

A Controlled Paper Currency.—In fact, it does not appear that gold money is really essential to carry on the transactions of exchange. If properly handled, they can be effected just as well by paper currency and bank credit entirely unsupported by gold. The real danger in the use of inconvertible paper money lies, not in the fact that it cannot be redeemed for gold, but in the possibility of over-issue. If paper money, unbacked by gold, were issued in quantities no more than sufficient to meet the needs of business, and if bank credit were similarly restricted and properly safeguarded, there is no reason to believe that the monetary system would collapse or that inflation would occur. In fact, there have been countries where inconvertible paper or overvalued silver money has served as a satisfactory medium of exchange and provided a fairly stable level of prices for considerable periods of time. It is therefore stated that the time has come when gold might be demonetized, to be replaced by a paper currency under honest and intelligent governmental control. One of the outstanding advocates of such a policy is the well-known British economist, J. M. Keynes. What he proposes is to create a fund of paper money and bank credit, the quantity of which is to be strictly limited by the central banking authorities. The banks would lend their credit in the form of deposits, just as they do now. In place of their present gold reserves, there would be reserves of paper money issued by the government for that purpose. The fund of bank credit would be regulated by manipulating the discount rate in such a way as to maintain prices at a fixed level, as shown by an official index number. The paper money would be quite inconvertible, without any gold reserve behind it, but it would be issued only in quantities sufficient to meet the needs of business, much as subsidiary coins are issued today. Such a currency would differ from paper issues of the past in that it would not be even nominally a promise to pay gold, and it would not be issued for purposes of securing revenue to the government, but solely to provide a medium of exchange, and its quantity would be definitely fixed by the needs of business. In so far as gold was needed for the settlement of international balances arising out of foreign exchange transactions, it could be met by a special fund provided for that purpose by the government. To a certain extent, this last proposal has been adopted in the United States by the establishment of the gold stabilization fund.

Provided such a managed currency as this were administered intelligently and honestly, there is no reason to believe that it would not work well. Its greatest danger would be that a weak government might utilize

the system as a source of revenue, thereby ushering in a period of fiat money inflation, with all its attendant evils. Yet even a gold standard system is not free from this possibility, as post-war experiences have shown. Moreover, most countries have so nearly demonetized gold that they have, in effect, managed currencies. The management, however, is designed to protect gold reserves rather than to stabilize the price level. Control of the latter sort may be the next step.

Summary

The general level of prices is subject to fluctuations which can be measured by means of index numbers. Such indexes indicate that the price level is very unstable. Changes in the level of prices not only accentuate the evils of the business cycle, but they have disastrous effects upon debtors and creditors, wage-earners, and business enterprizers, unless they result from changes in the costs of production during periods in which the quantity of money remains unchanged. These evils are most pronounced in periods of inflation caused by over-issue of paper money, such as occurred in many countries during the World War. Prices then rise with such rapidity that the value of money is almost destroyed, the accumulated wealth of creditors is practically confiscated, and industry is reduced to a state of collapse. Later, if the currency is redeemed at par, deflation ensues, bringing falling prices and economic difficulties almost equal to those of inflation. Where over-issue has been excessive, the money must be repudiated by redemption way below its nominal value, or by devaluation thru the issue of a new, properly secured money unit, exchangeable for the depreciated currency at a fixed ratio.

Price level fluctuations are due to changes in the ratio between purchasing power and the volume of goods, as indicated in the equation of exchange, $P = \frac{MV + M'V'}{T}$. This suggests that stabilization can be secured by manipulating the currency in such a way as to keep it at a constant ratio with the volume of trade. The desirability of attempting to attain stability has been a matter of debate. Among the advocates of relative stability are the neutral money theorists, who would seek to stabilize the money incomes of the factors of production, and prevent price changes caused by variations in the monetary factors of the exchange equation. Some difficulties in the way of achieving stability are presented by: (1) the statistical obstacles to constructing a really satisfactory index number of prices, (2) the question of what level of prices to fix as the standard, (3) the disturbances caused by fluctuations in the international movements of specie and trade which would result from having price levels stable in one country while they fluctuated in another, and (4) the disturbances of inter-price relationships which might result from efforts to keep prices at a given level. Our discussion indicated, however, that these difficulties are not serious enough to prevent a country

whose foreign trade is not unduly great from embarking on a policy of price level stabilization.

We considered several proposals for correcting the evils of fluctuating price levels. A multiple standard of debts would correct the injustices between debtors and creditors, but it would not get at the root of the problem. International bimetallism, fixing the value of money at the mean of two metals instead of one, might be superior to a gold standard, but greater promise of stability is afforded by more recent suggestions. One of these is the compensated dollar plan, under which the weight of the dollar would be varied in proportion to an index number of prices, actual gold coin being replaced by freely convertible gold certificates. This plan would eliminate fluctuations in the price level resulting from changes in the value of gold, but not those arising from expansion and contraction of credit. Stability of credit can be achieved thru various devices, including control of the rediscount rate, open market operations, changing reserve requirements, and government spending; or thru the 100 per cent bank reserve proposal. Some economists suggest abandoning the gold standard and establishing in its place a managed currency, consisting of inconvertible paper and bank credit definitely regulated so as to maintain stability of prices.

SUGGESTIONS FOR FURTHER READING

D. H. Robertson's *Money* (rev. ed., 1929) is a popularly written, able, and brief treatment of the general theory of money and the problems considered in this chapter. Two excellent, scholarly discussions of the general theory of money and credit will be found in R. G. Hawtrey's *Currency and Credit* (2d ed., 1923) and J. M. Keynes' *A Treatise on Money* (1930). For an elaborate analysis of the equation of exchange and the quantity theory of money see Irving Fisher, *The Purchasing Power of Money* (1911). An illuminating analysis of the war and post-war monetary problems of Europe, which was found very helpful in preparing the present chapter, is J. M. Keynes' *Monetary Reform* (1924). A comprehensive treatise on prices, which contains much valuable statistical and historical material, is to be found in G. F. Warren and F. A. Pearson, *Prices* (1933). Professor A. H. Hansen has dealt with some of the problems of this chapter in his keen analysis of *Economic Stabilization in an Unbalanced World* (1932), especially Part IV. F. A. Hayek has given a brilliant theoretical argument against price stabilization in his *Prices and Production* (London, 1931). Professor Irving Fisher has written several influential works, forcefully advocating the compensated dollar plan. Chief of these is his *Stabilizing the Dollar* (1920). J. S. Lawrence's *Stabilization of Prices* (1928) surveys the whole question of price stabilization and related problems, pointing out especially the difficulties involved.

See also the *Suggestions for Further Reading* at the end of the next chapter. Many of them have a bearing on this chapter also.

CHAPTER XVI

THE CONTROL OF BANKING IN THE UNITED STATES

A. The Federal Reserve Banking System and Its Antecedents

The Development of Bank Control in the United States.—Banks play so important a part in the complicated processes of exchange which characterize modern society that some adequate measures to supervize and control them are necessary. Not only do they hold deposits, the loss of which seriously impairs the wealth of their depositors, but bank activities are closely related to the movements of business cycles and the price level, as the two preceding chapters have shown. Consequently, there has been a steady growth of measures designed to regulate their operations in this country. The need for financial regulation was first made apparent by the so-called "wildcat" banking which prevailed prior to the Civil War. In that period there were no national banks, but many scattered banks acting under charters from the several states. These banks were subject to very little restraint from the state authorities, so that many abuses were prevalent. Bank notes were issued recklessly without adequate security until a great deal of worthless currency got into circulation. Bank failures were numerous and business was hampered by the monetary chaos. As a result, the federal government was induced to take a hand in the situation.

From that time the development of national regulation has gone thru two distinct phases, and it is now entering upon a third. The first phase is embodied in the National Banking Act of 1863. The purpose of this legislation was primarily to provide security of bank note issues, and a reasonable amount of safety for bank depositors. Security and safety were thought to be attained if the currency and deposits could be freely converted into standard money. The defects which became apparent after the National Banking Act was put into operation led to the radical changes embodied in the Federal Reserve Act of 1913. This legislation was designed to bring about not only safety of bank credit but also elasticity. By elasticity was meant the ability of money and credit to expand and contract in correspondence with the needs of business. We are now coming to recognize that our banking system has so close a relationship to the ups and downs of business activity and the price level that we must go further, by using the machinery of banking regulation to stabilize these movements—so far as it is within

the power of the banks to do so. It appears that we are now on the threshold of regulation which has this purpose definitely in mind.

The National Banking System.—We can best appreciate the growth of these principles by beginning with a short survey of the National Banking System established in 1863, for it is out of our experience with it that the Federal Reserve System now in effect was brought into being. Under the National Banking Law it was provided that national banks might be incorporated by the federal government, subject to certain measures of regulation administered by the Comptroller of the Currency. To prevent the incorporation of banks with inadequate resources, minimum capital requirements were established.[1] In addition to this there were provisions requiring the banks to set aside one-tenth of their annual profits until a surplus reserve equal to at least twenty per cent of the original capital was accumulated. They were also required to make periodic reports to the Comptroller of the Currency and to submit to thoro examination of their books by members of his staff at least twice a year.

By purchasing United States government bonds the national banks were permitted to issue National Bank Notes up to the par value of the bonds,[2] using the latter as security. As additional security, the banks had to deposit with the Treasurer of the United States lawful money[3] equal to five per cent of the notes it put into circulation. The United States undertook to guarantee the redemption of the notes, and it maintained this five per cent reserve fund for that purpose. By placing a tax of ten per cent on notes issued by state banks, the profit to be derived from them was wiped out, and they entirely disappeared from circulation. Thus the national banks were given a complete monopoly of the note issuing privilege. State banks were still permitted to exist, however, and thousands of them continued to do an ordinary banking business. All of these provisions of the National Bank System are still in effect, except those relating to note issues.

To protect depositors, the national banks were required to keep reserves against their deposits. These reserves varied in amount from fifteen to twenty-five per cent of the deposits (according to the size of the towns in which the banks were located), but only part of this had to be held in cash; the rest they could deposit in the banks of the larger cities. In this way it was thought that the integrity of bank deposit credit would be amply secured.

Defects of the National Banking System.—Altho this law cor-

[1] Originally the minimum capital requirements ranged from $25,000 in small towns to $200,000 in cities of over 50,000, but since 1927 no new banks can be incorporated with a capital of less than $100,000 without the consent of the Secretary of the Treasury.

[2] But not exceeding their market value. Neither could the note issues be in excess of the bank's capital.

[3] Lawful money then consisted of gold and silver coin or certificates, and United States Notes. In 1934 all forms of money in this country were made "lawful."

rected some of the worst evils which had existed, it had many undesirable features which led to agitation for its reform. Among its principal defects the following may be mentioned:

(1) The National Bank Notes were inelastic—that is, they did not expand and contract with the needs of business, because their issue depended on the market price of the government bonds held against them as security, instead of on business requirements for currency. Moreover, the bonds were not as good a security as they were supposed to be, for their value depended largely on the demand artificially created for them by the note-issuing privilege, and not on their desirability as ordinary investments.

(2) The deposit reserves prescribed in the act were excessively high, yet they failed to provide the safety desired. Under the law permitting country banks to keep three-fifths of their reserves in the banks of certain "reserve cities" and "reserve city" banks to keep one-half of their reserves in the banks of "central reserve cities" (*viz.,* New York, Chicago, and Saint Louis), the deposit reserves of the nation became concentrated, or "pyramided," in the banking institutions of New York City, where they were loaned to stock speculators in the form of call loans secured by stock exchange collateral. Every time there was an increase in the demand for cash thruout the country, funds were withdrawn from New York, causing the banks there to call in their loans. This forced borrowers to convert their collateral into cash by dumping it on the stock market, causing a slump there, and in business generally. The situation was aggravated by the rigidity of the requirements. When the bank reserves had reached the legal limit established, there was no means by which the banks might be permitted to make further extensions of credit in cases of great emergency. Hence, when credit became strained, a panic was easily precipitated.

(3) There was no national discount market by which the surplus funds of banks in one locality could be used to relieve a scarcity of credit elsewhere. Loans were commonly made on local commercial paper which was not sufficiently negotiable to be discounted in other cities. Banks with surplus funds had no recourse but to invest them in call loans where they were used for stock speculation, with the undesirable results already described.

(4) Foreign and domestic trade was handicapped by the fact that bank acceptances were not legal in this country.[4] Importers and other business men were thereby deprived of a means by which they could have turned their drafts into bank acceptances which could be readily discounted in New York and other financial centers.

(5) There was lacking any device for the clearing of bank checks and

[4] A bank acceptance arises in this way:—one business man buys goods from another, desiring to pay for them later. He makes an agreement with his bank whereby it agrees to accept drafts drawn upon it by the seller from whom the goods were purchased. Such a draft becomes an obligation of the bank when the latter has endorsed its acceptance upon it. It can then be discounted anywhere, because of the high credit standing of banks.

other claims between banks in different parts of the country. The development of clearing houses had taken care of local needs in this respects, but there was no national clearing house.

(6) The Independent Treasury System, by which the United States government took care of its own funds, caused heavy withdrawals of cash from the market during times when federal receipts were large, to be hoarded in the treasury vaults until periods of heavy disbursements. The irregularity of these movements was upsetting to the banking world.

(7) Finally, there was no central agency to coördinate the banking activities of the country and to mobilize their resources as a unit for national needs. The United States was a nation with thousands of small, independent banks, scattered over its vast territory. In this respect it differed from most of the other countries in the world, where many of the problems we were facing had been met by the development of great central banks, either owned by, or closely affiliated with, the government.

The Federal Reserve Act.—In 1913 we passed the Federal Reserve Act, which was in effect a compromize between the centralized banking systems of Europe and the highly decentralized banking system of the United States. The country was divided into twelve districts, in each of which a Federal Reserve Bank was established. These were placed under the supervision of a Federal Reserve Board (now called the Board of Governors) with sweeping powers over the national banking structure. The system incorporates the leading features of the old National Banking System, with certain modifications designed to correct its chief defects.

The Federal Reserve Banks.—The principal machinery of the system rests in the twelve Federal Reserve Banks to which reference has been made.[5] These banks must have an initial capital of not less than $4,000,000. It is provided by the national banks, which are required to subscribe an amount equal to six per cent of their combined capital and surplus. This makes all of the national banks members of the system and part owners of the Federal Reserve Banks. State banks may become members also by subscribing to the capital and by submitting to the same regulations to which national banks must conform. As there are certain advantages enjoyed by members of the system, many state banks have availed themselves of this privilege, altho many others, including some of the largest ones, have not.

Each Federal Reserve Bank is governed by a board of directors of nine persons, divided into three groups, designated as classes A, B, and C. The three class A directors are chosen by the member banks, which are divided into three groups according to size, each group having the privi-

[5] These banks are located in Boston, New York, Philadelphia, Cleveland, Richmond, Atlanta, Chicago, St. Louis, Minneapolis, Kansas City, Dallas, and San Francisco. There are also a number of branches in other cities.

lege of electing one representative to the board. The directors of this class are usually bankers, and are appointed specifically to represent the banking interests of the members. The three directors in class B are also appointed by the member banks, but they must be business men or farmers resident in the district, and not bankers. They represent the business interests of the community at large. The class C directors are appointed by the Board of Governors and may be thought of as representing the government. One of them, called the Federal Reserve Agent, represents the Board in its relations with the bank. The directors appoint a president for five years subject to approval of the Board.

The Federal Reserve Banks are expected to earn a profit. These profits, up to six per cent of the capital, are paid as dividends to the member banks. Additional profits can be used to build up a surplus for the institution until forty per cent of its capital has been accumulated. After these claims have been met any additional profits are payable to the government.

We see that the Federal Reserve Banks are semi-public, semi-private institutions. They are owned and partially managed by the member banks, but the government shares in the management thru the class C directors and thru the powers of control exercized by the Board of Governors.

The Board of Governors.—By an amendment to the law passed in 1935, the Board of Governors of the Federal Reserve System now consists of seven members appointed by the President of the United States by and with the advice and consent of the Senate. They hold office for 14 years at a salary of $15,000 per year, and their terms are so arranged that one will retire to give way to a new appointee every alternate year. Thus, the personnel of the Board cannot be rapidly altered, and this permanence of membership assures some continuity of policy. One of the members of the Board is appointed governor. There is also an advisory council consisting of one representative from the board of directors of each of the Federal Reserve Banks. It meets quarterly, merely to advise and confer with the Board in order to keep it in touch with local conditions.

The powers of the Board of Governors are extensive and important. It appoints the three class C directors of the Federal Reserve Banks, and the presidents of these banks are appointed subject to its approval. It may also suspend or remove any officials of these banks at its discretion. It controls the issue of Federal Reserve Notes by the Federal Reserve Banks and it has power to fix the rate of rediscount which they charge for loans. Within limits, it may also alter the reserves which member banks must hold against their deposits. The Board can compel one Federal Reserve Bank to rediscount the discounted paper of other Federal Reserve Banks, if that seems necessary; and it has numerous other duties and powers. We shall mention more of its

activities in considering the operations of the Federal Reserve Banks, but we cannot go into all of them in detail. The importance of the Board of Governors can hardly be overemphasized. It stands at the helm of the financial structure of a great nation, with all the power over our industrial life which that implies. Therefore, the efficiency with which it exercises its functions is a matter of great public concern, and it is vital to our welfare that its personnel should be always of the highest and free from political influences.

The Rediscounting Operations of Federal Reserve Banks.—The Federal Reserve Banks are bankers' banks. For the most part they do not have relations with the public at large. Chief among their operations is the making of loans to member banks thru the process known as rediscounting. This process may be illustrated by an example. Let us suppose that a bank in Springfield, Ill., has demands for loans from its customers which are greater than its present resources enable it to supply without overstepping the limits of the minimum reserves required by the banking law. If business in Springfield is active, the credit demands of the community are above the normal, and it would be a hardship upon the business men for the banks to refuse them further loans. There is need for an expansion of credit. These banks, in the course of their ordinary business operations, have "discounted" many notes for their patrons. That is, they have granted loans to them (in the form of bank deposits), to the amount of their promissory notes, less interest thereon for the time the loan is to run. (This deduction for interest is the discount.) The banks then hold these discounted notes—or commercial paper, as it is called—as security for the loans they have made. They can take this commercial paper to their Federal Reserve Bank in Chicago and have it rediscounted; that is, the Federal Reserve Bank will issue a new loan to the Springfield banks, holding the already once-discounted paper as security. The member banks in Springfield now have a deposit with their Federal Reserve Bank to the amount of the commercial paper they have placed with it, less the rediscount. The deposits thereby created with the Federal Reserve Bank can be counted as part of the legal reserve of the member banks in Springfield. With this additional credit at their disposal they can increase their loans to the business men of Springfield and prevent that stringency of credit which otherwise would have been felt.

Our previous discussion showed the need for a discount market in this country which would make possible the transfer of idle credit resources to districts where there was need of them, and which would facilitate the financing of foreign trade. For the establishment of such a market the development of a superior credit instrument, such as the bank acceptance, was necessary. The Federal Reserve Act removed the obstacles to the use of this instrument by authorizing the national banks to "accept" drafts arising

out of trade transactions. In order definitely to encourage the use of this form of credit the Federal Reserve Banks have given preference to the bank acceptance for purposes of rediscounting. As a result of these measures the bank acceptance has come into extensive use in New York city, where it has been found most helpful in connection with foreign trade. Business men outside of New York, however, have not widely adopted it. The effort to create a national discount market by this means, therefore, has not succeeded. There are other difficulties in the rediscounting process which will be discussed presently.

Open Market Operations.—Another method is available to meet the situation. There is an Open Market Committee composed of seven Board members and five representatives of the Federal Reserve Banks, chosen so as to represent five different sections of the country. Under the complete control of this Committee, the Federal Reserve Banks may engage in what are known as "open market operations." That is, a Federal Reserve Bank with surplus funds, not needed for ordinary loans, may purchase bank acceptances, foreign bills of exchange, domestic drafts and certain government securities in the open market. Formerly, it could also deal in gold coin or bullion at home or abroad.

These open market operations can be used to accomplish a number of things: (1) A Federal Reserve Bank can use its idle funds to purchase paper outside of its own district where there is a greater demand for loans, thereby distributing the loanable resources of the nation economically and equalizing interest rates between different districts. It was for this purpose that a national discount market was most needed. (2) It enables the Federal Reserve authorities to control the expansion and contraction of credit, if control of the rediscount rate fails. If it is desired to correct a stringency of credit existing in the country, the Federal Reserve Banks may use any surplus funds they have available to go into the financial markets and buy bank acceptances or securities from brokers or bankers who make a specialty of dealing in such paper. The money expended in these purchases finds it way into banking circles, providing funds to ease the credit situation. If the credit market is too "easy," loans being obtainable on terms which, in the opinion of the Federal Reserve authorities, are tending to produce undesirable inflation, the Federal Reserve Bank can cause a contraction by selling in the open market such bank acceptances and securities as it already holds. This withdraws funds from banking circles and forces curtailment of loans. (3) Open market operations are also useful in connection with foreign exchange. When there is a surplus of foreign bills in New York, the Federal Reserve Bank can buy them, thereby preventing a fall in the exchange rates to the gold import point and averting an international movement of gold. At other times, when the demand for bills is excessive, it can offer its supply on the market to prevent the opposite movement of exchange rates and of

gold. In addition, the banks formerly had the power to buy and sell gold, and, thus, to control the country's gold reserves. This power, however, now rests with the Treasury. The effectiveness of these operations will be discussed in Part B of this chapter.

Federal Reserve Notes.—The Federal Reserve Banks must be in a position to provide such funds to the member banks as the rediscounting process may require. To meet this need a new form of paper money was created, known as Federal Reserve Notes. When a member bank rediscounts its paper with the Federal Reserve Bank, it is placed in the custody of the Federal Reserve Agent, who holds it as partial security for Federal Reserve Notes which may be issued against it. These notes are obligations of the United States government, which guaranteed (prior to 1933) to redeem them in gold upon demand. As the law now stands (1938), a reserve of 100 per cent must be held to secure these notes, not less than 40 per cent thereof being in gold or gold certificates; the rest may consist of commercial paper or United States government obligations. The notes are now legal tender, and they circulate readily because they are amply secured: (1) by the credit of the United States government; (2) by the credit of the business men upon whose rediscounted paper they were issued; (3) by the 40 per cent reserve fund of gold certificates; (4) by the gold in the banks or our Treasury to secure these certificates; and (5) by the assets of the member banks, which are indebted to the Federal Reserve Banks to the amount of the loans out of which the Federal Reserve Notes arose.

Federal Reserve Bank Notes.—Federal Reserve Notes must be carefully distinguished from Federal Reserve Bank Notes, which were also provided for in the law. We have mentioned the inelasticity of National Bank Notes under the National Banking System. It will be recalled that the National Bank Notes were issued against government bonds held as security. It was intended that the Federal Reserve Banks would gradually buy these bonds from the national banks at par, and retire the National Bank Notes previously circulating against them. Federal Reserve Bank Notes were to be issued in their place on approximately the same terms. It was expected that the National Bank Notes would thus pass out of existence, and, eventually, the Federal Reserve Bank Notes would likewise be retired. Not until 1935 was the retirement of National Bank Notes actually begun by withdrawal of the government bonds upon which they were issued. Only $231,000,000 worth remained in circulation by February 1938. Twice since the passage of the Federal Reserve Act, however, considerable quantities of Federal Reserve Bank Notes have come into circulation in a way not originally intended.

During the World War a large quantity of silver held in reserve against silver certificates was sold to Great Britain for use in India, and, to replace the silver certificates thereby retired, Congress authorized the issuance of

Federal Reserve Bank Notes, secured by United States Treasury Certificates. Some $260,000,000 worth of Federal Reserve Bank Notes were issued under this provision, but practically all of them were subsequently withdrawn and the silver certificates restored by the purchase of additional silver. Again, in the panic of 1933, the Emergency Banking Act of that year authorized the issuance of Federal Reserve Bank Notes against direct obligations of the United States, or various other forms of commercial paper, until the crisis was passed. Some of the notes were issued under this provision, but they, too, have since been mostly withdrawn. By February 1938, only $32,000,000 worth were still circulating.

Deposit Reserves and Deposit Elasticity.—We have seen that, under the national banking system, the deposit reserves were excessively high. Under the Federal Reserve Act these reserves were substantially reduced. As the law now stands (1938) the reserves must not be less than 13 per cent for member banks in "central reserve cities," 10 per cent in "reserve cities," and 7 per cent elsewhere; but the Board of Governors has the power (since 1935) to raise these requirements, at its discretion, up to amounts not exceeding twice these figures. The Board has used this power from time to time to offset the tendency to credit expansion latent in large excess reserves. On time deposits the reserves which are required are only 3 per cent. The required reserves must be kept in the form of deposits with the Federal Reserve Bank of the appropriate district. This means that the member banks' reserves really consist of Federal Reserve Bank deposits, which, as we have seen, may be established thru the process of rediscounting. The Federal Reserve Banks, in turn, must hold reserves of 35 per cent in lawful money against their deposits. Thus our deposit reserves (except gold and silver, which are now kept mostly in the federal Treasury) are concentrated in the Federal Reserve Banks. Expedience requires, however, that member banks keep a small cash reserve to provide for withdrawals by their depositors. For this five per cent is usually sufficient. The concentration of reserves in the Federal Reserve Banks provides much greater security than was possible when the reserves were scattered among the individual national banks of the country, even tho the amount of such reserves is less than before. With the reserves concentrated in the Federal Reserve Bank of a given district, they can be used to extend credit to any member banks of the region which may have need for it.

Altho the establishment of the twelve Federal Reserve Districts has succeeded in distributing the funds of the country more generally than they were under the National Banking System, the concentration of the funds in New York has not been overcome to as great an extent as was expected. Many banks still retain their New York connections, leaving funds on deposit there which are used, as before, to make call loans on stock exchange collateral for speculative purposes. The Federal Reserve

Bank of New York also has attained a position of dominance in the Federal Reserve System which was not intended.

The rediscounting process of the Federal Reserve System, coupled with the concentration of reserves in the Federal Reserve Banks, was intended to provide elasticity of credit by making it possible for member banks to secure loans in the form of deposits which could be used as a reserve basis for further loans to their own customers. This was expected to provide almost indefinite expansion of credit in time of need. Moreover, if strain develops at some point in the system, the Federal Reserve Board can require the Federal Reserve Bank in one district to rediscount paper for that in another, thereby bringing the surplus of reserves of districts where the demand is low to the aid of those where the situation is tense. Finally, if a severe crisis occurs, so that the credit structure is seriously threatened, the Federal Reserve Board can suspend reserve requirements for a period of thirty days, and again for an additional period if necessary. But on such excess of loans beyond the minimum reserve requirements a tax must be paid, thus tending to discourage their use and to encourage the restoration of normal conditions. It was hoped that this abandonment of the rigid reserve limits which prevailed under the old system and the expansive credit facilities made available by the rediscounting process would make impossible the occurrence of another business panic, such as that of 1907. It is to be noted, however, that only certain high-grade types of commercial paper are available for rediscount with the Federal Reserve Banks. Since there is ordinarily a profit to be made from loans on less well secured collateral, many banks both inside and outside the Federal Reserve System have continued to make them. Many such loans are made for purely speculative purposes on stocks and bonds deposited as security. These loans have prevented the Federal Reserve System from providing that security and elasticity of credit which was intended, as we shall see.

Clearings and Collections.—We have seen that the system of interregional clearings under the National Bank System was very unsatisfactory. Local clearings were handled well enough thru the medium of the clearing house, but there was no similar machinery broad enough in its scope to meet the needs of the country at large. The Federal Reserve System provided such a mechanism. In principle it does not differ greatly from the workings of a clearing house. Since all the member banks in a given district have deposits with their Federal Reserve Bank, any claims which they have against other banks can be sent to the Federal Reserve Bank and credited to their deposits, the Federal Reserve Bank merely deducting the sum from the deposit of the bank against which the checks are drawn. This permits the clearing of all the checks in the district in a simple, efficient, and economical manner. Under the rules of the Federal Reserve System,

each bank must accept the checks of other banks in the system at par, and the expensive charges for collections and exchanges which formerly prevailed are thereby done away with. Non-member banks are permitted to use the clearing services of the Federal Reserve System, and have quite generally availed themselves of the privilege. The result is that it now reaches almost every bank in the country and provides a complete system of intra-district clearances.

Not only does each Federal Reserve Bank provide this means of offsetting checks thruout the banks of its district, but there is also a system for clearances and the settlement of balances between the twelve Federal Reserve Districts themselves. This is taken care of by a Gold Settlement Fund operated by the Federal Reserve Board in Washington. Under this arrangement, each Federal Reserve Bank maintains a deposit in the fund of at least one million dollars in gold or gold certificates. In practice the deposits are actually much greater. In the course of its business, claims will come into each Federal Reserve Bank on banks in other districts, and the Federal Reserve Bank definitely undertakes to collect such claims for the member banks which are its clients. These claims it sends to Washington, where they are charged against the Federal Reserve Bank of the district upon which they are drawn. Thus, the deposit of each Federal Reserve Bank in the Gold Settlement Fund is credited with the claims which it presents against the banks in other Federal Reserve Districts, and debited with the claims which the banks in the other districts present against it. Only when there is a large balance of payments in one direction from certain districts to others is it necessary to send gold, most of the claims and counter claims being offset and the balances settled by mere bookkeeping operation in Washington. This does away with the much more expensive practice of continually making shipments of cash from one part of the country to another.

The machinery afforded for clearings and collections by the Federal Reserve System has been its most successful feature.

Federal Reserve Banks and the Federal Treasury.—The Federal Reserve System was intended to correct our independent treasury policies by permitting (but not compelling) the state to deposit its funds in the Federal Reserve Banks, and by authorizing the latter to act as fiscal agents for the government. These purposes were only partly realized. In 1921 the sub-treasuries were abolished and the Federal Reserve Banks took over their functions. Also, the Federal Reserve Bank of New York has become an important medium for federal financial operations. Yet the Treasury has retained a position of dominance which has recently been increased by its assuming custody of our gold and silver reserves and its setting up of a huge "stabilization fund" to influence domestic currency and foreign exchange. These developments are a departure from the original purposes of the system.

B. A Critical Appraisal of Our Banking System

Has Our Banking System Provided Security?—At the beginning of this chapter it was stated that bank regulation is designed to attain security (*i.e.,* redeemability) of bank notes and deposits, elasticity of bank currency, and the stabilization of price levels and business activity. The reserve provisions governing the issue of our various bank notes are sufficient to maintain their redeemability under ordinary conditions, yet in 1933 a situation arose which caused us to suspend gold payments completely. Gold and silver were nationalized and the possession of either gold coins or gold certificates became illegal. In the following year these restrictions were only partly modified. Gold could be obtained to pay international balances and for use in the arts, subject to Treasury regulations, but not for other purposes. At the same time the content of the gold dollar was reduced to 59 per cent of its former weight, as indicated in the previous chapter. Thus we departed from a genuine gold standard, while our money was deliberately depreciated in purchasing power.

However, by far the greater part of our currency consists, not of money, but of bank deposits, which circulate from person to person in the form of checks. This process is described in any elementary economics text. The safety of the deposit in his bank is far more important to the individual who has a bank account than that of the cash which he carries in his pockets, for the latter is usually only a few dollars kept on hand for the making of minor purchases, while he depends on the validity of checks drawn on his bank to pay most of his bills. Bank deposits are claims redeemable in cash; hence, when our money was depreciated, depositors lost correspondingly. Moreover, if a depositor's bank closes, so that his checks are no longer honored, he suffers even greater losses, which may mean ruin or serious embarrassment. In spite of the reserve requirements of the Federal Reserve System, and its provisions for extending credit to banks in time of need, we are still far from securing that degree of security for bank deposits which is needed.

Naturally, credit is available only to solvent institutions, and there are not sufficient safeguards to prevent unwise management or other factors from plunging our banks into insolvency. This is clearly shown by the excessive number of bank failures which occur each year in the United States. In the decade from 1923 to 1932, inclusive, 9,883 banks failed in this country with combined deposits of over four billion dollars. There were 4,000 failures in the single year 1933.[6] These failures represent losses of millions of dollars to depositors even in years of prosperity, while in times of business crisis and depression the losses become enormous. If we compare the failures of those banks which are members of the Federal Reserve System with those which are

[6] The statistics are those given by the Federal Reserve Board in its *Annual Reports* and *Federal Reserve Bulletins.*

not, we find that the former show a better record. In both cases, however, the number is too high, and far exceeds that of other countries with strong central banking systems.

Has Our Banking System Provided Elasticity?—An elastic currency, it has been explained, is one which expands and contracts with the needs of business. The Federal Reserve Notes were intended to provide that elasticity of currency which was lacking in the National Banking System. Thru the issuing of notes against rediscounted paper, currency was supposed to expand when the needs of business required it. Contraction of the notes was expected to take place as follows: when the business men whose rediscounted paper is held as security pay back to the member bank the amount of the loans which this paper represents, the member bank must repay its loan to the Federal Reserve Bank, and if it has no new paper to deposit as collateral for a new deposit, the Federal Reserve Notes issued against the first loan must be withdrawn. However, an amendment to the Federal Reserve Act provided that when the loans behind the Federal Reserve Notes were repaid, in lieu of retiring them, the Reserve Banks could continue them in circulation by keeping a reserve of 100 per cent in gold (or gold certificates, which represent gold) as security. During the World War and after, huge quantities of gold came into this country in payment for our exports and loans abroad, and as this gold found its way into the Federal Reserve Banks, Federal Reserve Notes were allowed to circulate against it. Now this part of the Federal Reserve circulation is inelastic, for it depends in no wise upon the needs of business, and is contingent upon the somewhat arbitrary movement of gold reserves. Altho the gold would no doubt have gotten into the monetary circulation in some form or other anyway, its use in this manner partially defeated the maintenance of elasticity of bank notes. The retention of National Bank Notes (up until 1935) was an additional obstacle that is now happily removed.

Neither has there been the elasticity of bank deposits which was intended. In this case elasticity was to be secured by raising the rate of rediscount when inflation showed signs of becoming excessive, thereby restricting the volume of loans; and by lowering the rate when credit was contracted, thereby encouraging expansion. The former Federal Reserve Board, however, did not show either the wisdom or independence necessary to secure such an end. Under the exigencies of political policy and the pressure of private financial interests, it allowed the facilities of the Federal Reserve System to be used in an unwise way. Coming into existence just at the time of our entry into the World War, it was used by the government as a convenient agency for providing the funds necessary to carry on the conflict. In order to provide an easy market for government bonds, the Federal Reserve Banks were persuaded to make loans freely, using these bonds as

security. The result was a drastic inflation of credit. Opposition to a policy of recession proved so strong that the expansion continued until 1920. By this time a policy of recession, thru the raising of rediscount rates, was begun, but the inflation had gone so far that a business collapse was inevitable, and the depression of 1921 ensued.

This depression was followed by another period of inflation, but again the reserve banks took no constructive action to check the expansion until 1928, when discount rates were raised, but not sufficiently to accomplish the desired result. There followed another collapse, which ushered in the drastic depression of 1930–1933. We must conclude, therefore, that the Federal Reserve System has not so far operated in such a way as to reduce the ups and downs of the business cycle to any appreciable degree. This means that our currency system is not elastic in the sense of being fully responsive to the volume of business activity.

The Panic of 1933.—The two weaknesses of the Federal Reserve System, described in the foregoing paragraphs, are most clearly revealed by recent events. The Federal Reserve System was designed to make the occurrence of panics impossible by providing ample credit to its member banks, and, if necessary, cash, in the form of Federal Reserve Notes, by the machinery already described. From 1913 to 1930 we did pass thru two serious business depressions without the occurrence of a panic, and this was generally attributed to the virtues of the Federal Reserve System. Following the stock market crash of 1929, however, there began a serious depression which culminated in 1933 with a genuine panic. The unsound conditions of certain banks in the State of Michigan led to such general distrust of our financial institutions thruout the country that depositors began to make heavy withdrawals of cash, which would soon have exhausted our banking reserves. To avert a national catastrophe President Franklin D. Roosevelt declared a banking holiday for several days, during which all national banks were closed thruout the country. In most states similar action was taken. At a special session of Congress emergency banking legislation was prepared, under which only sound banks were permitted to reopen, while conservators were appointed to conserve the assets of such institutions as were not deemed ready to resume normal operation. An ample supply of cash was made available by liberalizing the provisions under which Federal Reserve Notes might be issued. Even so, in many cities emergency currency had to be issued in the form of Clearing House Certificates, commonly known as "scrip," which were paper money backed by all the assets of banks which were members of the Clearing House where such currency was issued.

In 1935 an amendment to the Federal Reserve Act changed the name of the Federal Reserve Board to that of Board of Governors and greatly increased its authority. Prior to that it had not complete control over redis-

counting or open market operations; neither did it have power to increase the deposit reserve requirements of member banks. By the terms of this amendment, these functions are now definitely centralized in the Board of Governors. While this concentration undoubtedly makes it possible for the banking system to be subject to political pressure, effective control could hardly be secured without that danger. Much will depend upon the personnel of the Board.

Too Many Banks and Inadequate Supervision.—One of the weaknesses of our banking system which has caused so many bank failures and has prevented more complete success for the Federal Reserve System is to be found in the fact that we have too many small scattered banks in this country, more than four-fifths of which operate under state charters and do not come under the National Banking System. While some of the larger state banks have become members of the Federal Reserve System, we still have a great horde of state banks over which the Federal Reserve System has little or no control. A large proportion of our banks are established with insufficient capital and are managed by small-town business men who do not know enough about good banking principles to direct them wisely. It is too much to expect that all these banks will be properly supervized by the banking authorities. Bank supervision in most of our states is notoriously lax, and even the national banks are not checked up as strictly as they might be in many cases.

These conditions are largely the result of political pressure. Bank examiners and officials are often selected for political considerations and hampered in the performance of their duties by political influences. Local business men bring pressure thru politicians on state and national legislators, which prevents the tightening up of banking regulations. State banks are allowed to exist outside the Federal Reserve System and small national banks are permitted to survive because Congressmen have not had the courage to face the opposition from folks back home which would be sure to be aroused by a change in these policies. Some progress has been made by the adoption of bank deposit insurance (presently to be described) which brings state banks under the supervision of the Federal Deposit Insurance Corporation; but it would be desirable to make every bank a member of the Federal Reserve System. Furthermore, we would probably get better management and fewer failures if our multiplicity of scattered banks were consolidated into a few larger institutions with local branches to care for local needs.

Branch Banking and Chain Banking.—There has been some tendency toward the integration of banks into larger units in the United States, but it has been hampered by existing legislation. Branch banking in a more or less restricted form is permitted in about half the states of the Union, but Congress has been rather hostile to the establishment of branches by national banks, owing to the political pressure of small banking interests.

Nevertheless, the Comptroller of the Currency has permitted some branch banking under the national system, in spite of existing laws, in several ways. National Banks have been allowed to establish offices in other parts of the same city for the receipt of deposits and the paying of checks. Also, where two or more National Banks have been merged, or where state banks with already existing branches have been absorbed by National Banks, they have been permitted to retain the separate establishments which existed prior to consolidation. The centralization of banking and the establishment of branches has also been progressing by the system of so-called chain banking, which has been most developed in those states where branch banking is not allowed. By this plan independent local banks maintain their separate corporate existence but they are joined together in policy and interests by a holding company or some similar device. In many cases investment banks have been linked up with commercial banks by this means. As these chains may extend over more than one state and may include both state and national banks, the present system, with divided jurisdiction among bank supervisors, is quite incapable of providing adequate supervision over their operations. There is danger that unwise banking practices may creep into them. Subsidiaries in the chain can be so manipulated as to divert their funds into improper channels, and policies can be dictated by the "higher ups" in such a way as to make profits for themselves at the expense of stockholders in the smaller institutions. That chain banking is not without these dangers is evidenced by the fact that many of the chains have failed.

A forward step toward the remedying of this situation has been taken by the Glass-Steagall Act of 1933. One of the provisions of this act permits banks which are members of the Federal Reserve System to establish state-wide branches in any state which gives similar permission to its own banks. At the same time, the Federal Reserve authorities have sweeping powers to examine into the organization and affiliations of holding companies so as to prevent any abuses. It is hoped that this will encourage the development of branch banking on a sound basis and will bring into the Federal Reserve System large state banking organizations which were formerly excluded. Thus an opening wedge toward a more unified banking system in this country has been made; but we need to go further in this direction. We should permit the growth of large institutions maintaining numerous local branches, but under strict and competent public supervision, thereby achieving the advantages of superior management, economy, and efficiency which come from integration. Not until all the banks in the country are coördinated into a unified system under adequate regulation will our banking problems be on the way toward solution.

The Expanding Functions of Banks.—Another weakness in our banking structure which has been responsible for our numerous bank failures is a lack of understanding on the part of bank officials and legislators

of certain developments in banking practices which touch deeply some of the most fundamental processes of economic life. The current theory of banking, for the most part, regards commercial banks as institutions whose primary function is to provide working capital to business men thru short-time loans. At the same time they are regarded as supplying the community with credit-currency, which constitutes most of the circulating medium by which exchange is carried on. Most banking legislation has been dominated by this point of view, and has been designed mainly to protect credit by safeguarding the gold reserves and preventing undue expansion. It has been assumed that other banking functions would be carried out by specialized institutions of different types. We have investment bankers whose business is devoted to supplying fixed capital for industrial operations, and trust companies who engage in such fiduciary business as caring for decedents' estates, acting as guardians, and the like. However, under that general tendency towards integration which characterizes industrial growth, there has been a tendency for these various operations to be carried on by a single institution, commercial banks expanding into other fields.

The Federal Reserve Act gave National Banks permission to receive time deposits and hold them subject to a reserve of three per cent (originally five per cent). With this authority they have developed a considerable savings banking business. They have also been allowed to perform fiduciary functions, so that they can now handle types of business which were formerly left to the trust companies. In addition to these new functions, they have developed in other directions, such as dealing in bank acceptances and foreign exchange.

Commercial Banking, Investment Banking and the Formation of Capital.—Students of banking are beginning to realize that, partly as a result of these expanding functions and partly as a phase of their ordinary short-time lending operations, commercial banks are coming to play an important part in the provision of fixed capital which was not formerly understood. It has been taken for granted that when banks lend for such short periods as thirty, sixty, or ninety days, the funds borrowed from them would be used to supply the business men with working (that is, circulating) capital. Fixed capital was supposed to come into existence thru private savings, consumers, by abstaining from the purchase of consumers' goods, investing their surplus funds in securities sold by investment bankers.

It now appears that a great deal of fixed capital results from commercial banking operations without any voluntary saving on the part of consumers. It is quite usual for banks to allow their customers to renew their loans repeatedly, so that what is ostensibly a short-time loan, to be liquidated at its maturity, becomes a more or less permanent investment. In these circumstances, there is nothing to prevent business men from using the funds borrowed from their banks for fixed capital if they desire, and this

is very often done. Most commercial banks also lend extensively to investment bankers, brokers, and speculators, holding stocks and bonds as collateral security. Since these loans are used primarily to facilitate the operations of investment banking, they go quite largely into the provision of fixed capital. This has been accentuated by the affiliations between commercial banks and investment banks thru holding companies and interlocking directorates and in other ways. Finally, commercial banks make permanent investments directly by using their surplus funds to purchase stocks and bonds. Altogether the amount of fixed capital supplied in these ways must be very large. A recent writer has estimated that two-thirds of all the credit extended by commercial banks goes into fixed capital in this manner.[8]

Now this entrance of commercial banks into the long-time capital market alters considerably the economists' interpretation of banking functions, and is largely responsible for the phenomenon of involuntary saving which is represented as so important a disturbing factor in the overinvestment theory of business cycles. Until recently, economists assumed that only savings and investment banks were engaged in the financing of permanent capital, and their rôle was rightly regarded as a rather passive one. Such institutions act as intermediaries who bring investors and enterprizers together, so that the latter can obtain funds made available by the former. The savings and investment banks assume the responsibility for directing the funds of their clients into the most profitable channels, but they do not themselves create funds for investment. Thus they allow the supply of capital to arise naturally out of the voluntary savings of individuals, and permit it to be balanced with the demand for it by the long-time equilibrium rate of interest. But when commercial banks enter the market with funds created out of short-time loans, the birth of fixed capital no longer depends solely on voluntary savings, and the balancing of demand and supply thru the long-term interest rate is interfered with. The short-time interest rate now actively affects the long-time loan market, and, by its fluctuations, causes investment now to exceed, now to fall short of the volume of voluntary savings, as explained in Chapter XIV. This is a serious defect which casts serious doubts upon the validity of our whole system of commercial banking. Hence, we shall presently consider a plan which would change it rather radically.

There is one other phase of this problem which must yet be considered. Bank deposits subject to check are demand liabilities, which means that the depositor can ask for his money at any time. So long as the banks lend only for short periods for purposes which are self-liquidating, so that the

[8] H. G. Moulton, *Commercial Banking and Capital Formation*, in the *Journal of Political Economy*, Vol. 26, p. 729. This is one of a series of four articles by this author, who discusses in an illuminating manner the problem of this paragraph.

money is pretty sure to be repaid at the end of thirty, sixty, or ninety days, they are in little danger of having such demands for cash made upon them that they will not be able to meet them, for maturing short-time loans will soon allow them to make their assets liquid enough to meet their current demands. But we have seen that what are nominally short-time loans have in current practices become long-time loans. The credit so extended was put into real estate and other permanent investments which could not quickly be converted into cash. These constitute the so-called "frozen assets" which so embarrassed the banks during the depression of 1930–1933. In a falling market these assets could not be converted into cash quickly enough to meet the demands of depositors. Forced liquidation under such conditions meant the sale of such investments at prices so low that they would ruin both the banks and the depositors. We see here another reason why commercial and investment banking should be kept separate and long-time loans should be financed only out of savings deposited by individuals who clearly understand that they cannot ask for immediate payment of the sums so invested.

An attempt to get at this problem by the separation of commercial banking from investment banking has been made in the Glass-Steagall Act referred to above. All member banks in the Federal Reserve System were ordered to divorce themselves from affiliation with any investment banking institutions within one year after the passage of this law, and it was made unlawful for investment banking houses to engage in commercial banking operations. Member banks were also prohibited from paying interest on demand deposits, a provision which, it is hoped, will discourage depositors from maintaining large cash balances in their checking accounts, and will induce them to put their surplus funds into interest-bearing savings accounts or other permanent investments in the usual way. However, these provisions cannot be expected to check very drastically the indirect use of commercial loans for investment in fixed capital just described.

Loans for Speculation.—Another difficulty which has proved an obstacle to successful bank regulation in this country has been the lending of bank funds to borrowers who use them for speculation of the gambling type, particularly in the stock market. The concentration of funds in New York banks, which were loaned out on call for stock speculation, is the most flagrant illustration of this, but the same thing goes on to a lesser degree in all parts of the country. The tendency is for such loans to be made in large volume when prices are rising, for it is then that profit is to be made from speculation; then, when the banking situation gets critical, the loans are curtailed, and borrowers are forced to dump their speculative holdings on the market at sacrifice prices in order to repay the banks. Business crises are commonly precipitated in this way. The stock market crash in the fall of 1929 preceded the business depression of the ensuing years. It is difficult

to deal with this problem because bankers, eager for profits, do not scrutinize carefully enough the purposes for which the money they lend their patrons is to be used. The Federal Reserve authorities were not formerly able to stop it because they did not control the individual loans made by member banks. It was their duty to rediscount paper for the latter so long as they met the requirements for eligibility, without scrutinizing the individual transactions out of which such paper arose.

The Glass-Stegall Act has wrought a change in this situation by stipulating that Federal Reserve Banks must give some consideration to the amount of loans granted by member banks for speculation in securities, real estate, or commodities, in determining whether further Federal Reserve credit should be allowed them. If the Board of Governors and the Federal Reserve Banks use this power wisely, the abuse of speculative loans may be very much reduced in the future and this should prove helpful in stabilizing business conditions generally. But one can never be sure that the banking authorities will be able to resist the pressure for easy credit in times of business boom. Like many of the other questions we have considered, it comes down to a matter of wisdom and power of independence on the part of the reserve officials to do their duty in the interests of the country's welfare. No amount of legislative or administrative machinery can accomplish much unless it is in the hands of competent, strong, and impartial persons.

The Insurance of Bank Deposits.—The banking collapse of 1933 convinced Congress and the President that something had to be done to protect depositors in the future from the loss of their funds deposited in the nation's banks. Accordingly, the Glass-Steagall Bill of 1933 provided a temporary plan of bank deposit insurance. In 1935 this was superseded by a permanent plan. Under this scheme, all depositors in insured banks are guaranteed up to a maximum of $5,000 each. This protects the small depositors against loss. To carry out the plan, a Federal Deposit Insurance Corporation was created, managed by the Comptroller of the Currency and two citizens appointed by the President. This Corporation is possessed of a guarantee fund derived from the following sources: $150,000,000 was appropriated from the Federal Treasury; each Federal Reserve Bank was required to subscribe one-half of the surplus in its possession on January 1, 1933; and all other banks which participate in the plan are assessed, annually, one-twelfth of one per cent of their average total deposits.[9] All solvent member banks must enter into this arrangement, and non-member state banks may participate subject to examination by the Corporation. If a bank should fail, the Corporation takes charge and proceeds to liquidate it. Insured deposits are paid out of a guarantee fund either thru transfer of the deposit claim to a new bank in the same community, or to another insured bank, or in such other manner

[9] This is substantially correct; actually the computation is somewhat more technical.

as the Board of Directors of the Corporation may prescribe. One gain that will be reaped by the plan is that it will bring more state banks under Federal supervision.

Altho this is a new departure in our National Banking System, it has been tried in Canada and eight of our own states. None of our state systems were successful, so that they had to be abandoned. Many of the funds went bankrupt in times of business depression, for the anticipated losses had not been calculated on sound insurance principles; hence the guarantee funds were insufficient to meet the strain of excessive failures. Moreover, the systems were so administered that the honest and efficient banks were assessed to make good the losses of unsound institutions administered by unscrupulous or incompetent managers. No system of guaranteed bank deposits can succeed that is not based on sound actuarial principles and accompanied by the most rigorous control for the prevention of dishonesty and inefficient management. Given these prerequisites, however, the principle of insurance should be just as applicable to bank losses as to other risks, such as death, fire, casualty, and so on. It is to be hoped that the new federal experiment in this field will be so administered that it will succeed and the undeserved losses which so many innocent depositors have suffered from bank failures in previous years will not be repeated.

The One Hundred Per Cent Bank Reserve Plan.—The commercial banking system plays so conspicuous a part in the disastrous fluctuations of business with which our economy is afflicted that there is a serious question whether the power which the banks have to expand and contract the volume of credit ought not to be taken away from them. To this end a number of competent economists have recently proposed that the banks hereafter be required to keep reserves in cash amounting to one hundred per cent of their deposits, instead of the fractional reserves they now hold. The checking departments of banks would then cease to be agencies for making loans, but would continue as institutions for the safekeeping of funds and the convenient making of payments by checks. They would derive income from this business by charging their customers for the services rendered. Loans would be handled by separate savings banks, or by loan departments of commercial banks, which would function the same as savings banks now do. They could lend only the funds invested in them by their stock- and bondholders, or deposited by their patrons in savings accounts. Deposits could not be created, as they now are, by merely discounting the promissory notes of borrowers. Thus the function of creating currency would be taken away from the banks and completely separated from loan making.

To put this plan into effect, the federal government could either acquire ownership of the Federal Reserve Banks, or create a currency commission, with power to issue paper money (or some other kind of credit) to serve as cash reserves. Enough such money would be issued to bring existing bank

reserves up to the volume of outstanding bank deposits. It would reach the banks thru the purchase, by the commission, of bonds, notes or other assets which the banks now own. (The commission might buy outstanding United States government bonds, which would thus in effect be retired in exchange for paper money, thus saving the government the cost of interest thereon.) The banks would then have one hundred per cent reserves back of their deposits, and would be required to maintain that percentage in their checking departments thereafter. Loans could no longer be expanded by creating additional demand deposits. New loans could be made by the loan departments only as old loans were paid off, or as new savings deposits arose out of the savings of depositors. The currency commission, however, could change the amount of money, controlling it along the lines suggested in the preceding chapter. Thus, for the first time, the government would have positive machinery for a policy of intelligent monetary management.

This proposal merits serious consideration. The requirement of a one hundred per cent reserve would provide absolute safety for bank depositors. Collapse of the banking system would no longer be possible. Panics, with their shortage of money, would be a thing of the past. Overinvestment, financed by bank credit expansion, would be done away with. Investment would depend upon voluntary savings, giving an opportunity for the rate of interest to perform more freely its function of equalizing demand and supply in the investment market. If the government handled its monetary policy wisely, much might be accomplished toward promoting a greater measure of business stability.

Summary

The federal control of banking in the United States has passed thru three stages: (1) the National Banking System, designed to provide security (redeemability) of bank money and credit; (2) the Federal Reserve System, which aimed at security and elasticity; and (3) the growing recognition that bank regulation must be used for business stabilization. The National Banking System set up National Banks with exclusive authority to issue bank notes secured by government bonds. The integrity of deposits was safeguarded by the fixing of minimum reserve requirements. The law, however, revealed the following defects: (1) the National Bank Notes were inelastic; (2) bank reserves, tho excessively high, failed to protect depositors, because they were concentrated in New York city; (3) there was no national discount market by which surplus funds from one region could be used to relieve scarcity elsewhere; (4) the non-use of bank acceptances handicapped both foreign and domestic trade; (5) there was no satisfactory medium for clearing checks between different parts of the country; (6) the independent treasury system was unsatisfactory; (7) there was no central agency to coördinate and direct our banking activities.

The Federal Reserve Act, passed in 1913, was designed to correct these abuses by establishing a semi-centralized banking system in this country. The law created twelve Federal Reserve Banks owned and partly managed by the member banks but subject to sweeping control by a Board of Governors. This system provided elasticity of bank credit (thru the process of rediscounting) and created a national discount market by providing for the rediscounting of commercial paper and the use of bank acceptances. Control of credit was further facilitated by giving the Federal Reserve Banks the power to engage in open market operations. To provide a more elastic currency Federal Reserve Notes were issued with reserves of gold certificates and rediscounted paper as security. Federal Reserve Bank Notes were created and eventually (beginning in 1935) the old National Bank Notes were retired. Deposit reserves were reduced and kept in the Federal Reserve Banks. Intra-district and inter-district clearings were provided thru the Federal Reserve Banks and the Gold Settlement Fund, respectively. Federal Reserve Banks also act as fiscal agents for the government.

The events of 1933 and 1934 showed that the convertibility of actual money in this country was not assured, and the excessive number of bank failures that we had not yet attained security of deposits. The old Federal Reserve Board permitted undue expansion and contraction of credit instead of stabilizing business. The events of 1933 showed that the system was not proof against financial panics. We have too many banks, many of them outside the Federal Reserve System, which it is impossible to supervize adequately. The tendency toward integration of banks into a smaller number of larger units offers some prospect of improvement if adequately supervized. Commercial banks are expanding their functions into savings and fiduciary banking. They are also supplying a large amount of fixed capital thru the long-time lending of created credit, a form of forced savings. This combination of commercial and investment banking creates difficulties for the banks in the form of "frozen assets," and it upsets the natural process of saving. Loans for speculative purposes have also contributed to banking difficulties. The bank acts of 1933 and 1935 have attempted to meet some of these difficulties by centralizing more power over rediscounting, open market operations, and deposit reserves in the Board of Governors, by divorcing commercial from investment banking, by reducing speculative loans, and by a system of bank deposit insurance. The one hundred per cent reserve proposal would take away the power of private banks to expand or contract credit, by replacing bank credit with paper money or credit controlled by the federal government.

SUGGESTIONS FOR FURTHER READING

A well written and interesting account of the defects of our old banking system, and of the provisions of the Federal Reserve System designed to correct

them, is E. W. Kemmerer's *The A B C of the Federal Reserve System* (10th ed., 1936). This little book has been quite useful in the preparation of the present chapter. See also H. G. Moulton, *The Financial Organization of Society* (3rd ed., 1931), especially Chapters XIV to XXVII, inclusive. A very exhaustive discussion of the Federal Reserve System is that of H. Parker Willis, *The Federal Reserve System: Legislation, Organization, Operation* (1923). Professor Willis, in collaboration with J. M. Chapman and R. W. Robey, has published a more up-to-date general treatise, entitled *Contemporary Banking* (1933). Two other recent works are P. M. Warburg's *The Federal Reserve System* (2 vols., 1930) and S. E. Harris's *Twenty Years of Federal Reserve Policy* (2 vols., 1933). Among other recent works which should be mentioned are W. E. Spahr, *The Federal Reserve System and the Control of Credit* (1931); C. S. Tippets, *State Banks and the Federal Reserve System* (1929); and J. L. Laughlin, *The Federal Reserve Act, Its Origins and Problems* (1933). A short summary of recent developments in Federal Reserve policies and problems is given by H. Parker Willis in the article entitled *Federal Reserve System* in the *Encyclopedia of the Social Sciences*.

Lauchlin Currie's *The Supply and Control of Money in the United States* (1934) is a scholarly analysis of the nature of bank credit and the problem of controlling it. The book emphasizes the functions of banks as creators of money, and it contains a chapter treating sympathetically the 100 per cent reserve plan. B. M. Anderson, of the Chase City National Bank of New York City, in an address entitled *A Critical Analysis of the Book by Lauchlin Currie, Etc.* (published in pamphlet form, 1935) takes sharp issue with Currie's views.

Works sufficiently recent to include an account of the banking legislation of the New Deal are R. G. Thomas, *Modern Banking* (1937), which gives a good description of present banking institutions and practices, and J. I. Bogen and others, *Money and Banking* (1936), which gives the historical development up to the present. Irving Fisher's *100% Money* (1935) presents a lucid and persuasive account of the 100 per cent reserve plan.

CHAPTER XVII

PROTECTIVE TARIFFS AND OTHER BARRIERS TO TRADE

A. The Theoretical Aspects of Protection

The World Trade Impasse.—Any person who reads a theoretical resumé of the conduct of international trade with a reasonably open mind must be impressed with the strength of the case for freer trade. The simple principle that a country gains most by concentrating on the production of goods and services to which it is best suited does not require a profound knowledge of economics to be understood. Common sense is sufficient to grasp the idea that the greatest economy and efficiency in the use of the world's natural resources, technical equipment, and labor supply, would be achieved if the channels of trade were free and unobstructed. And yet, with the outstanding exceptions of Great Britain and Holland, nations thruout the world have followed a policy of vigorous restriction and control of foreign commerce. This policy is not new; it will be recalled that the doctrines of mercantilism were in a large measure concerned with the conscious control of foreign trade. Today a virtual state of economic war exists. Countries with industrial systems geared to a high rate of mass production have sought frantically to extend their markets in face of the rapidly tightening restrictive measures of other countries. All attempts at international coöperation have failed and we have witnessed what may well be called a renaissance of mercantilism. All the old economic fallacies have been given once more the dignity of sound economic theory in the popular mind. Each country seeks to increase exports and reduce imports by every device within its power. Obviously, *every* nation cannot have an export balance; so the sequel to the utilization of government control has been the strangulation of trade. In the present chapter we shall examine barriers to freer trade. Of these the most important is the protective tariff; hence the major portion of our available space will be devoted to that problem. But other restrictive measures must not be neglected, chiefly the quota system, exchange control, the use of bounties, and the control of raw material exportation.

The Theory of International Trade.—It will be well for us to review very briefly the nature of international trade before attacking the prob-

lem of our tariff policy. The student of economics will recall that international trade grows out of the geographic or territorial division of labor. Each nation is a little different in climate, natural resources, quality of the people, and the technical state of the arts. Barring interference, these are the chief influences that determine the course and nature of international trade. A nation tends to specialize in the production and exportation of those commodities which it can produce most effectively, importing in exchange those commodities which it can produce least effectively. To put it differently, a nation tends to import those goods which other countries can produce more cheaply than it, and to export those goods which it can produce more cheaply than other countries. This is the familiar *law of comparative costs.* It pays a nation better to specialize in those industries which the available natural resources, technical equipment, and population make most advantageous, and to rely on international trade to supply the commodities that can be produced only at heavy costs at home. The items of trade between nations are of three sorts—commodities, services, and credit transactions. Commodity exports and imports, such as manufactured goods, raw materials, gold, and silver, are known as the *visible items* of trade. The services rendered, such as shipping, banking, and insurance services, taken together with the credit transactions—loans, interest payments, and the like, constitute what are called the *invisible items* of trade. They are invisible in the sense that you cannot stand in the customs house at a port, such as New York, and count them as they come in. International trade must be viewed as an exchange of commodities and services for other commodities and services. It follows that the total visible and invisible exports must balance the total visible and invisible imports. The commodities and services we obtain from other countries must be paid for; we are in their debt to that extent. On the other hand, the commodities and services we deliver to other countries, they must pay for; we have credit abroad to the extent of these exports. If these debits and credits do not balance, the difference must be paid in specie or temporarily charged up as a loan.

The various kinds of international trade dealings necessitate payments between individuals in different countries. Since each country has its own monetary system, the manner of making payment is much more intricate in foreign trade than it is in domestic trade. The prevailing standard money in a given country may be gold or inconvertible paper. In any case payment is accomplished by the use of credit instruments called *bills of exchange.* A bill of exchange is a draft drawn by a creditor against a debtor, ordering him to pay a specified sum of money to a certain party, at a certain time and place. An American exporter of wheat to England has money due him from that country; an Englishman owes him the purchase price of the wheat. The American can draw a bill against the English importer, ordering him to pay the amount of the purchase in English pounds at a certain time

and place in England. There will be at the same time other Americans who have imported goods from England—English cutlery, for example. Such Americans will wish to make payment to English manufacturers for their purchases. Our wheat exporter can sell his bill to a cutlery importer, and thereby secure the money due him. The cutlery importer can then send the bill to the English manufacturer in payment of his debt. The English manufacturer can present the bill for payment to the English wheat importer, against whom it was drawn. Thus, the two transactions can be settled without the actual movements of money across the water. Thru the medium of a bill of exchange, English cutlery pays for American wheat.

The price at which bills of exchange are sold is called the *rate of exchange.* Under gold standard conditions, this rate is at *par* when bills sell for their equivalent in gold. The prevailing rate will be above or below the gold par depending upon variations in the supply of and demand for bills. The upper and lower limits of this fluctuation in rates are set by the costs of shipping gold. Gold movements tend to correct discrepancies between the supply and demand of bills. If the supply of bills of exchange in the United States exceeds the demand for them (which means that total exports have exceeded total imports) gold will tend to be imported to restore the balance. This importation of specie will tend to increase our price level and decrease the price level abroad, having the effect of making the United States a dear place in which to buy. Imports into the United States will be stimulated and exports discouraged, tending to restore once more the balance of trade. Where a nation has abandoned the gold standard the stabilizing influence of gold movements is lost and the rate of exchange will depend upon the purchasing power of the paper currency, the probability of restoration of gold payments and other speculative factors. Bills of exchange are rarely sold directly to an importer by an exporter. A middleman, such as a dealer in exchanges or a banking house, handles such transactions. Usually exporters with bills for sale will sell them to a dealer or bank and importers wishing to purchase a bill will go to a dealer or bank to obtain one.

International trade differs in principle but little from domestic trade. The same principles of division of labor, exchange, etc., apply in both cases. Just as it is profitable for the southern part of the United States to specialize in cotton and New England to specialize in manufactures, so it is profitable for nations to specialize in those things for which they are adapted and to procure thru exchange other needed commodities. The reasons for distinguishing between domestic and foreign trade grow out of differences in languages, customs, forms of government, legal institutions, monetary systems, and the like, all of which increase the complexity of international trade far beyond that of domestic trade. All of these differences are relatively permanent, because the mobility of labor and capital between nations is much less than that within a single nation.

The Protective Tariff.—There is no part of the science of economics where greater divergence exists between the teachings of economists and actual practice than in the matter of the protection of industry. The conclusions of most of the world's greatest economists, ever since Adam Smith published his *Wealth of Nations* in 1776, have been overwhelmingly in favor of free trade. But, with the outstanding exceptions of Great Britain and Holland, nations have followed the policy of restricting vigorously the importation of commodities by the erection of tariff walls. A protective tariff is a duty placed on specified imports into a nation, levied for the purpose of enabling the home producers to raise the price of their commodities to a point high enough for them to sell their product at a profit in spite of the competition of producers operating under lower production costs abroad. The home consumer is asked to pay a higher price for the goods he buys in order to keep the home industry in existence. The industries which operate at a disadvantage are enabled to run at a profit. In so far as a protective tariff really protects (that is, keeps out the more cheaply made foreign product) the advantages of geographic specialization are lost. Such a policy always means a cost to the nation, for under it the output of industry must be of less value than would be obtainable if it concentrated on what it could do best and purchased other products from abroad. The arguments used to support our protective tariff system are lamentably weak, but their wide popularity makes it necessary for us to examine carefully the reasoning on which they are based. We shall find some justification for protection of a modified sort. The evidence is not *all* on one side of the question, but the usual defences of protection are full of errors.

The Case for Free Trade.—If international trade were permitted to run its course free and unrestricted, each country would gradually find its place in the world's markets, concentrating on the things for which it was best suited and depending on other nations for the things that it could produce only at a comparative disadvantage. The greatest economy and efficiency in the use of the world's natural resources, technical equipment, and labor would tend to be developed under absolute free trade between nations. Almost every act that restricts the freedom of trade tends proportionately to reduce the gains of specialization and, consequently, to reduce the real income available for the world's consumption. This is because the restriction of trade diverts productive activity away from industries in which the advantage is great towards industries of less advantage. The United States illustrates the operation of free trade. Within our boundaries each of the individual states specializes in forms of productive activity to which it is well adapted. Thus, New England states specialize largely in manufactures, the southern states in cotton, the middle western states in wheat and corn. California and Florida are famous as producers of citrus fruits. Now suppose that the United States were divided into three independent countries, the first including from Canada to the Mason-

Dixon line and from the Mississippi to the Atlantic, the second including all land south of the Mason-Dixon line and west as far as the Mississippi, the third including all territory west of the Mississippi. The protective propagandists would now probably become active in these three countries. Each nation would seek to build up its own industries and shut out the products of the other countries. The advantages of climate, resources, and large-scale production would be lost, and each area would be taking on productive activities at a disadvantage. Individual producers within the countries might gain but the country as a whole would obviously suffer a loss. Pushed to a point of absurdity, New England might place a tariff high enough to raise its own citrus fruits. This would develop a new industry. Hot-houses would have to be constructed, laborers employed, equipment purchased, and business organization developed! According to the doctrines of protectionists, the prosperity of New England would be much enhanced! It is quite obvious, however, that the opposite would be true; she would find her prosperity reduced. By concentrating on manufacturing (to which she is well adapted) and exchanging the product for citrus fruits, she can secure a larger quantity of the latter, per unit of productive effort expended, than she could by producing them herself. This illustration may seem absurd, but the principle involved is exactly the same when the degree of disadvantage, being less, is not quite so obvious. The division of our country into three independent nations, each with a protective tariff system, would have a disastrous effect on the development of future prosperity. It would cripple tragically the efficient, specialized, economic organization that has evolved within our boundaries. The case for free trade rests on the advantages of specialization. The inefficiency of forcing on a nation the production of goods under conditions of disadvantage should be obvious to all. Protection of industry in some cases may be worth what it costs, but any argument in its favor that fails to recognize that cost is apt to be fallacious.

The Balance of Trade Argument.—Much of the support given the policy of protection is based on a widespread belief in the desirability of a "favorable" balance of trade. A "favorable" balance of trade exists when merchandize exports exceed merchandize imports. This situation is called "favorable" on the assumption that the balance will be paid in gold. In popular language, "It brings money into the country." An "unfavorable" trade balance exists when merchandize imports exceed merchandize exports. It is considered "unfavorable" because in this case gold tends to flow out of the country to restore the balance. To bring money into a country is thought to make it wealthy, while to reduce the stock of money is believed to make it poor. Exports, consequently, are to be stimulated in every way possible, and imports discouraged. This, in fact, is the actual policy followed by our government. The Department of Commerce and the State Department de-

vote no small portion of their time to the building up of export trade. Very little attention is paid to the question of wise importation. To hold such a belief implies ignorance of both the fundamental principles of trade and the nature of money. Imports are paid for, not by the sending out of money, but by exports; curtailment of imports eventually tends to reduce exports. When an American exporter seeks payment for his goods he draws a bill of exchange against his foreign customers. This bill he hopes to sell to an importer, making payment for goods or services purchased abroad. If, however, importations have been materially reduced, our exporter may be unable to sell his bill profitably. Under a gold standard he would have the option of using his bill to obtain gold abroad, but this would only raise prices in the United States and lower them abroad discouraging American sales to foreign purchasers and encouraging American purchases abroad. Under a paper standard our exporter would find that the price he could obtain for his foreign draft would have fallen. This drop in the exchange rate would also make foreign sales unprofitable. Thus in either case the ultimate effect of the restriction of imports would be to discourage exports and to encourage imports until a reduced volume of trade would again be at a balance. The *effect of restricting imports is to reduce the volume of trade;* high tariffs fall heavily upon industries producing for the export market.

The Infant Industry Argument.—One of the earliest arguments in defense of tariff duties was that they are needed to protect infant industries. A tariff can be used to protect new industries from foreign competition until they are able to stand on their own feet. This argument has taken both a general and a specific form. The general form was made famous by the German economist Friedrich List, writing in 1841. He observed that a country in the agricultural stage of development, about to advance into the manufacturing stage, will meet difficulties during the transition period in competing with industrialized nations already established. He had in mind the new industries developing in the United States and Germany at the time of his writing, which industries faced competition from the firmly established industries of Great Britain. He advocated the use of protective duties to reduce the difficulties of the transition period. The specific form of the infant industry argument is the application of the principle to a single industry even after the industrial stage is well under way. During the World War many industries were created, such as the aniline dye industry, as a result of the cutting off of foreign competition. These industries met serious competition after the war, and protection was demanded, with the promise that they would eventually be able to meet foreign competition.

Economists generally admit that there is some merit in the infant industry argument; but it can be held to justify protection only in the case of industries in which the protecting country may be expected eventually to have a comparative advantage. There is nothing to be gained by pro-

tecting "infants" which will remain permanently at a disadvantage. In practice this distinction has proved difficult to apply. How can one tell in advance which industries will in the long run be able to stand on their own feet and which will not? Selection of industries to be protected degenerates into political bickering. At best this argument justifies protection only for a short, temporary period. List limited the period of protection to twenty-five years. However, once protection has been granted it is hard to secure the removal of the duties. Vested interests become firmly intrenched, and new arguments are used to justify continued protection.

The Home Market Argument.—Under the leadership of Alexander Hamilton, the protective tariff policy was inaugurated in the United States on the basis of the infant industry argument. With the passing of a quarter of a century this argument was no longer applicable and a new defense of protective duties was brought forth, known as the home market argument. It was popularized largely under the leadership of Henry Clay. Protection, it was claimed, keeps out the foreign competitor and builds up a new industry at home that would not otherwise exist. The new industrial community which develops in the center where this industry is established constitutes a new and additional market for the sale of domestically produced goods, especially farm products. The argument was used to win over the agricultural sections of the country to the support of tariff duties. The fallacy inherent in this reasoning is that *an additional market is not created* by protection, but a domestic market *is substituted* for a foreign market. The cutting off of imports would have the effect of reducing exports. In building up new industries, protection does not create an additional industry, it merely diverts labor and capital from industries which would otherwise be exporting goods, to industries producing goods which would otherwise be imported. A national loss results, because an industry in which we are at a disadvantage is substituted for one in which we can produce at an advantage. Some writers admit a slight loss in this direction, but assert that the substitution of a proximate market for a distant market adds stability and certainty, and also reduces transportation costs. But distance from markets cannot be considered economically a disadvantage, if the loss in transportation costs is more than offset by the gain in specialization. Goods are purchased from abroad because they can be obtained cheaper than at home, even after paying all transportation costs.

Of late the home market argument has been put in a slightly different form.[1] Large-scale industries with heavy capital investment require stability of output, it is said, for a slight drop in sales may force the industry into bankruptcy because of the continuation of the overhead expense. It is argued that protection should be granted such industries in order to guarantee

[1] *Cf.* Josef Grünzel, *Economic Protectionism* (1916).

them at least the domestic market, and to that extent stabilize these industries. The plausibility of this reasoning has given some support to those who favor the unfortunate current trend toward nationalism.

The High Wages Argument.—To gain the support of labor, protectionists have always claimed that the high American wage level is the direct result of our protective tariff policy, and that the continuation of this high level is dependent upon the continuation of that policy. It is claimed that competition with the pauper labor of foreign nations must lower American wages and reduce, consequently, the American standard of living. The truth of this contention is said to be demonstrated by a comparison of American wages with those prevailing in foreign nations, such as Germany and Japan. This reasoning errs in confusing high wages with high labor cost. As we have had occasion to point out in Chapter IV, there is no necessary relation between high wages and high labor cost. Labor cost should be measured in terms of cost per unit of product rather than in wages per man. Labor costs in the former sense are low in the United States in spite of the high wage level. This contention is substantiated by the volume of our export business, which amounted to more than five billion dollars in the prosperous year of 1928. American producers were evidently able to pay high wages, plus transportation costs across the ocean, and yet undersell the foreign producer in his own market. If labor costs were so much higher in the United States than abroad, how would it be possible to export any merchandize at all? Surely this argument proves entirely too much! As a matter of fact, these exports could be much larger if we would only permit other nations to send goods to us, accepting imports from them by which they could pay us for our goods which they desire. Think of the automobiles, radios, sewing machines, and other products that American manufacturers could sell to 400,000,000 Chinese, *if the Chinese only had the ability to pay for them,*—that is, if they could increase their exports.

The explanation of the high wage level in the United States is found in our marvelous natural resources, the technical development of our industries, and the enterprize and efficiency of our people. Wages would probably be high in the United States under any system. They are just as high in non-protected industries as in protected industries. In truth, it is because wages *are* high in certain industries that other industries, to which we are not so well adapted, find they must be given financial aid in order to secure labor and yet meet foreign competition. The principle of opportunity costs is here at work. We must conclude that protective tariffs do not maintain high wages. On the contrary, protection must lower real wages by increasing the prices of the commodities that workers buy. The workers must pay a price sufficient to cover the cost of producing commodities at a disadvantage. In Chapter XXII, we will learn how the increasing of wages can be promoted.

The Employment Argument.—Closely allied to the high wages argument is the claim that low tariffs cause unemployment and that high tariffs establish new industries and increase employment. Economists have pointed out with wearisome repetition that unemployment has not been more general, on the average, during periods of low tariff duties than during periods of high tariff duties in the United States. The obvious fact, that the removal of a tariff duty does frequently cause workmen employed at the time in that industry to lose their jobs, closes the eyes of the average person to the broad question of social advantage. But such unemployment is not permanent. This is only an argument against a sudden and complete abandonment of tariff duties. We may repeat what has already been stated with reference to the home market argument, that an additional industry is not created by a protective tariff, but one industry is substituted for another. The real causes of unemployment, together with appropriate remedies, we have already analyzed in Chapter IX.

The Diversity of Industry Argument.—Free trade may result in the narrowing of a country's productive activity to a relatively small number of specialties. Protective duties reduce this specialization and tend to diversify industrial activity. Many persons believe that the advantages of diversification so obtained compensate in the long run for the loss resulting from reduction of specialization. Economically, the gain is in the stabilization that is given the economic organization. The experience of our southern states in specializing almost completely in the production of cotton indicates the danger to be guarded against. When cotton prices are high the South is prosperous, but when cotton prices are low it is in depression. Everything depends on the price of cotton. For years the Department of Agriculture has been endeavoring to train the southern planter to diversify his cultivation, so that his economic well-being will not be so completely dependent on cotton. England, with her high development of industrialization, has also faced this difficulty. During the World War and post-war periods, serious economic problems existed growing out of the high degree of specialization present in English economic life. Free traders reply that diversity of industry, if carried very far, would mean serious economic loss; it is far better to risk instability and rely on the gains of normal and prosperous periods to take care of the periods of uncertainty and depression. It must be admitted, however, that there is some force in the protectionists' argument. Specialization must not be carried too far.

Economic Self-sufficiency and Political Unity.—German protectionists have made much of the claim that a nation should be economically self-sufficient, so that in time of war it would not be dependent on other nations for the commodities it requires. Since Germany has already developed intensive industrialization, the protectionist movement in that country has been largely in the direction of assisting agriculture, in order to

round out a complete economic organization. Even in peace time there is some merit claimed for economic self-sufficiency, for changes in the course of international trade will, under such conditions, affect a nation less seriously. England, for example, is finding that the nations with whom she previously traded her manufactured products for foodstuffs and raw materials are now developing industrial organizations of their own. The result is a drop in her foreign trade. A heavy strain has been placed on English industries; it has become increasingly difficult to obtain raw materials and foodstuffs and to find markets for finished manufactured products. The solution of this problem is one of the many serious questions facing the English people today, and some writers have gone so far as to predict a complete reorganization of the economic life of that nation.

A vigorous champion of the self-sufficiency argument has been found in Dean Wallace B. Donham. He writes, "I believe the road to prosperity in the years ahead lies in making this nation so far as possible self-sufficient, maintaining a proper balance between agriculture, mining, and manufacturing and supplying its own wants."[2] He argues that the "burst of foreign trade" during and after the war was an "exotic growth" and that our national policies should recognize this fact. Since industrialization similar to our own has taken place in many other countries, it would be impossible to restore the international trade of 1929. Even if such restoration were possible, it would be of doubtful value, since the fierce competition that would ensue would intensify international friction. Dean Donham does not advocate a policy of complete isolation; he believes there is more to be gained by placing the emphasis upon our domestic problems rather than upon international ideals impossible of fulfillment under present conditions. This, in his opinion, is especially true for the United States with a per capita export trade in 1931 of only six per cent of the per capita production.

Perhaps the economist is to be censured for viewing the world from an international free trade point of view. The world today is divided into nationalistic units, and until much progress is made towards international peace the economist will do well to fit his theories to existing conditions. There is little doubt but that the future economic development of the world must eventually alter our present conception of foreign trade. It is conceivable that, after the temperate zone is completely industrialized, we may be forced to a form of regional international planning, with foreign trade restricted to inter-regional trade in products peculiar to a given area, and trade between the temperate zones and the tropics. But in the opinion of the present authors, even if this situation were to eventuate, it should result from a process of evolution, and trade barriers of the absurd type so prevalent today can but make more difficult the attainment of the ultimate goal.

[2] Wallace B. Donham, *National Ideals and International Idols*, reprint from *Harvard Business Review*, April 1933, p. 390.

Certainly for the present, a policy of nationalism would be disastrous. While it is true that our foreign trade is but a small proportion of our total trade, in certain industries, for example, cotton and automobile production, the importance of foreign trade looms large.

The Key Industry Argument.—Since the World War, the economic self-sufficiency argument has appeared in a less extreme form as the *key industry* argument. We are told that certain industries, steel and shipbuilding, for example, are absolutely essential in war time, and therefore should be protected and maintained during times of peace. The difficulty with the key industry argument is that modern wars are fought on such a huge scale that it is hard to say just what industries are key industries. The World War taught us that food and clothing were just as essential as munitions for purposes of winning the conflict. The key industry argument therefore merges into a defense of protection in general.

The Problem of Dumping.—The practice of selling goods in a foreign market at a price lower than the total cost of production is known as *dumping*. The reason for this practice is the desire to market surplus production without "breaking" the domestic price. Dumping may be of two different sorts—(1) irregular or temporary dumping, and (2) regular or continuous dumping. Many industrial enterprizes find on their hands at irregular intervals a surplus stock of finished products. If this stock is placed on the domestic market, the price must be lowered in order to find purchasers, in accordance with the economic law of demand. But if this were done, it might be difficult in the future to restore the domestic price to the original point. Therefore the producer seeks to place his surplus products on a foreign market, selling them at whatever price they will bring, so long as operating (or variable) costs are covered. Whatever is received above the operating costs of manufacturing and marketing this surplus product will reduce the overhead (or fixed) costs of the plant output as a whole. Such dumping must, however, be of the irregular or temporary type. Permanent or continuous dumping is profitable only under monopolistic conditions. If an industry has a monopoly of the domestic market, it may fix the domestic price of its product at the point of greatest net return, and use its surplus plant capacity to produce goods for a foreign market, selling there, as in the previous case, for whatever price can be obtained, as long as operating costs are covered. Dumping may then last for long periods of time. Under competitive conditions it is clear that this practice would be impossible, since domestic prices would be forced down under active domestic competition.

The economic effects of dumping should be viewed from both the angle of the domestic consumer and of the foreign consumer. The foreign consumer obtains commodities at a very low price,—less than the total cost of production. If the dumping policy is permanent, the industry of the importing

country can adjust itself to such importations, and the country as a whole stands to gain. If, however, the dumping is irregular, the effect is to dislocate the industry temporarily, for while the dumped products are being imported, the local industries face heavy losses and may be driven out of business. Later, the failure to continue importation will cause a shortage to develop and local prices will soar. Conditions would be very unstable in the foreign market. As to the country from which the goods are dumped, consumers there will gain by the practice of dumping if the goods are produced under competitive conditions. This is because the sale of surplus products abroad will reduce the fixed charges on the plant as a whole. This result does not follow in case of monopoly conditions, for the gain would then go principally into the pockets of the owners of the industry; the gain would increase monopoly profits.

Many ardent free traders modify their views to the extent of advocating tariff duties to protect a country against dumping. If the importing country levies a tariff duty just high enough to equalize the price of the dumped product with the price charged in the producing or exporting country, then no protection is given home industry. If the foreign producer can undersell the domestic producer under such conditions, his total cost of production must be lower, and the principle of free trade is in operation. The difficulties with duties designed to protect a country against dumping grow out of the practical application of the principle. It is very hard to discover just when dumping is taking place and to what extent a low price is the result of this practice. And, assuming that these facts are accurately obtained, the imposition of the duty on the dumped goods must take place *after the act has occurred* and it is therefore likely to be ineffective against the most common form of dumping, the irregular sporadic type. The first difficulty can be reduced by placing the power of altering duties in the hands of an administrative officer, but even then the practical result in many cases will be the establishment of just one more opportunity for the raising of miscellaneous protective duties. Anti-dumping laws are quite common.

The Effect of Depreciated Currency on International Trade.—The effect of a rapidly depreciating currency on international trade is somewhat analogous to that of dumping. During the post-war period of rapid monetary inflation in Europe, for short periods of time the exchange rates on some European countries fell more rapidly than the general price level within those countries advanced. This situation—that is, the discrepancy between exchange rates and internal price levels—has the effect of artificially stimulating exports. The lag of the price level makes the country depreciating its currency a cheap place in which to buy. For example, Americans purchasing in Germany found that, as the value of the mark depreciated, the number of marks that could be obtained for the dollar increased faster than the prices in Germany were rising, making it extremely profitable

to purchase German goods. Looking at it from the other angle, the German producer exporting goods was producing at a cost level based on the internal prices, but he was selling at a higher price level in the world market. American producers became somewhat panic-stricken in the face of this situation, fearing that American markets would be flooded with foreign products. Tariffs were demanded to protect them from this danger. However, the fear proved to be unwarranted. The war left European industries in such a disastrous condition that it was impossible for the export trade to develop to any great extent. With the widespread substitution of "controlled" paper standards for the gold standard, the importance of variations between the internal and external (exchange rate) purchasing power of a currency in its effect upon the flow of trade, has been a significant cause of the introduction of various devices for the control of exchange rates. This problem will be discussed briefly below.

Bounties.—While the protection of industry is usually secured by the levying of duties on imports, the same end can be accomplished by the granting of bounties. *A bounty is a direct payment by a government to an industry for the purpose of stimulating its growth,* in contrast with the indirect financial support given an industry by tariff duties, thru the medium of raising prices. The bounty brings out into the open the true nature of protection—the extending of financial assistance to a particular industry. For that very reason, bounties are often favored by free traders as a substitute for protection, since then even an uninformed citizen-voter can see that protection of industry *costs him something,* and many of the arguments commonly used for protection during political campaigns lose much of their plausibility.[3] Another advantage of the bounty is that the burden of a protective policy can be placed on those best able to bear it by a carefully devized tax law, instead of forcing the consuming public to bear the major portion of the burden in the form of higher prices. If we must have protection, the bounty is probably preferable to tariff duties. In recent times, bounties have been extended primarily to support sugar growers, and to subsidize a merchant marine. In the latter case the purpose is not merely to encourage an industry, but also to build up a strong merchant fleet that will be available for military purposes should war arise.

B. The Problem of Tariff Making in Practice

The Making of a Tariff.—Under our federal Constitution tariff bills must originate in the House of Representatives. The House of Representatives turns over the duty of constructing the legislation to the Committee on Ways and Means. This committee holds public hearings at which the supporters of both sides of every projected duty may express their opinions and defend their own positions. The views expressed are colored by the

[3] *Cf.* F. W. Taussig, *Principles of Economics* (3d ed., 1921), Vol. I, p. 531.

prejudices and interests of the individuals represented. After the bill has been written, it is submitted to the House of Representatives, and many amendments are made on the floor. This process of amending is a vicious one, for it frequently degenerates into a "give and take" arrangement, each representative agreeing to vote for duties desired by other representatives, in consideration for their voting for his own suggestions. After passage, the bill is submitted to the Senate and again undergoes modifications. A joint conference between the two houses whips the final act into shape, and after passage by both houses it goes to the President for his signature. This procedure is described to indicate the possibilities of putting pressure on the legislators in the interests of special business groups. Very expensive lobbying campaigns are conducted. The result is a complex tariff law, listing an unreasonable number of commodities, many of little or no social significance. Professor Taussig, in discussing this question, cites two very interesting and typical cases. A duty on cheap cotton gloves was inserted in the Dingley Act of 1897 while the measure was under debate in the Senate. This provision had the effect of giving a certain corporation a monopoly of the sale of this form of glove, used primarily by policemen, United States Marines, and state militia, for dress occasions. The glove previously was imported from Germany. A second illustration is that of a duty on nippers and pliers, also introduced by the Senate in the same bill. This amendment was inserted on the request of a Utica manufacturing concern and was adopted for the special benefit of that specific corporation. In practice, tariff making departs far from sound economic principles.

The usual tariff act divides the commodities selected into groups or schedules, and places duties of two types, *ad valorem* and specific. An *ad valorem* duty is one levied in proportion to the value of the commodity. A specific duty is one based on some standard of measurement, other than value, such as bulk or weight. Each change of administration brings with it further tinkering with the existing rates, the Democratic Party standing for reduction of duties and the Republican Party standing squarely for high protective duties. The lack of permanence of the duties means numerous awkward periods of transition, requiring industrial readjustments.

The Tariff Commission.—Dissatisfaction with the conditions under which the tariff acts were constructed resulted in a provision in the Act of 1909, giving the President the power to employ expert assistance for purposes of obtaining information useful in administering the tariff laws. On this authority, President Taft appointed a Tariff Advisory Board. This Board was abolished in 1913 by the Democrats, but in 1916 they established one of their own (the United States Tariff Commission) which has continued to function up to the present time. The Tariff Commission does not have the power to fix rates, as, for example, the Interstate Commerce Commission does for railroads, for that power, in so far as customs duties are

concerned, is given only to Congress by the Constitution. To give such power to a commission would probably require a constitutional amendment. The Commission exists primarily for the purpose of investigating the operation and effects of customs duties. It makes reports of its findings and advises Congress and the President on the rates that should be adopted and the form the tariff law should take. Unfortunately, the findings of the Commission have thus far had but little influence on legislation. Perhaps more power and influence will be granted as the Commission gains in experience, and the protective issue diminishes in importance with the growth of our export trade. If we are to have a scientifically constructed law, and a uniform, stabilized tariff policy, the Tariff Commission should prove a useful, if not indispensable, organization.

The Equalization of Costs.—The recent introduction of the principle of equalization of costs has been heralded as a scientific solution of our tariff problem. According to this principle, an investigating body, such as our Tariff Commission, should first examine the costs of producing a product abroad and at home. After discovering the difference in costs prevailing in the two places, a tariff duty should be levied just sufficient to equalize the costs of production between the foreign and domestic producers. The proponents of the plan asserted that it would "take the tariff out of politics" and place it on a scientific basis. It was also asserted that it would place on the domestic producer the necessity of increasing his efficiency, for the effect of the duty would not be to give a great protective advantage, but would merely equalize competition. Unfortunately, the plausibility of this argument is very superficial and vanishes completely when one recalls the theory of costs of production. The costs of producing a given commodity are not uniform for all producers within a nation, but vary widely among them. In the words of the economist, there are marginal producers, whose costs of production just approximate the market prices of the product, and there are differential producers, whose costs are lower by various amounts, bringing the producers a surplus profit. The question then arises, Which producers' costs will be selected as a basis for the tariff duty? If the domestic producer with the highest costs in this country is compared with the foreign producer having the lowest costs, then all importations of that commodity will cease, for the advantage given all in this country would make it impossible for the foreigner to market his product. On the other hand, if the lowest costs in the United States were selected and compared with the highest costs in the foreign country, the protection given by duties equalizing such costs would be insignificant. All but the most effective producers in the United States would be shut out of the market. In other words, *the degree of protection obtained will depend on the costs of production data selected.* Thus, the problem of determining the tariff duty remains exactly where it was before the equalization of costs principle was established. Wherever the duty is

fixed, producers in both the home country and foreign countries will be able to market their product only if their costs are sufficiently low to meet the market price. The percentage of the total volume of a good consumed within a country that is to be produced within that country, will depend on the arbitrary fixing of the duty by governmental authorities. The one merit of this "scientific method" of making tariffs is that it does require investigation and the publishing of data, and this should be an extremely healthy influence in the construction of future tariff schedules.

Protection and the Trust Problem.—One unfortunate effect of our protective tariff policy has been the assistance given the formation of new trusts and the maintenance of those already established. As we shall see in Chapter XXVI, our government policy towards business in the past has been one of eliminating monopoly and maintaining free competition, but the enactment of protective tariffs has had, in part, just the opposite effect. When a duty is placed on a commodity produced under conditions of free competition the first effect is to raise the price by the amount of the duty. The resulting profits to producers then induce increased production, and competition gradually lowers the price until high-cost domestic producers are removed from the market. The temptation for competing producers to combine in order to obtain the full benefits of the protective duty is therefore very strong. Where domestic monopoly already exists, there is a great temptation to place pressure on Congress in order to obtain protection against foreign competition that might endanger the monopoly's power. If a high duty is levied, the monopoly can utilize to the fullest extent its power to raise domestic prices. The expression, "Tariffs are the mothers of trusts," received great publicity during the period of rapid trust formation. The exact extent to which tariff duties have stimulated trust formation is, however, difficult to determine, except in specific cases. The early sugar trust and, more recently, the aluminum monopoly, have been commonly pointed to as illustrations of monopolies encouraged by protective duties. To avoid this unlooked-for effect of protective duties, provision might be made for the removal of the duty protecting any industry which the Federal Trade Commission decides is a monopoly or is maintaining unfair competitive practices. Thus, a new regulatory weapon would be obtained, and at the same time one abuse of our protectionist policy would be removed.

Reciprocity and "Most Favored Nation" Treaties.—In protecting their own home industries, nations found that they brought on themselves retaliation in the form of protective duties in other countries to which their goods were exported. Desire to overthrow these restrictions has led many countries to negotiate treaties with the countries to whom their exports flow. This has given rise to the concept of reciprocity. *Reciprocity* has been defined by Professor Taussig as *the revision or reduction of duties in return*

for similar favors from foreign countries.[4] The benefits of these treaties are automatically extended to many other countries because of the existence of "most favored nation" clauses in the commercial treaties. In Europe this clause is interpreted to mean that any favor granted to any one country applies to all other countries having such treaties. In the United States the clause has always been interpreted to mean that the favors granted to any one country will be extended only if other nations with whom such treaties have been made agree to the provisions that brought forth the concession. Thus if the United States has a treaty with France that contains the "most favored nation" clause, and then signs a new treaty with Germany agreeing to lower certain tariff duties in consideration of Germany lowering her duties in like manner, these lower duties of the United States apply to France only if France makes the same concession Germany made. Since the World War, however, the United States has gone over to the European interpretation. Today a network of commercial treaties involving reciprocity and "most favored nation" clauses has been established. A more direct attack upon trade barriers would be desirable but these treaties have the merit of permitting a controlled, gradual transition towards the goal of less restricted trade relations.

The Reciprocal Tariff Act of 1934.[5]—The United States negotiated a reciprocal tariff treaty with Canada in 1911, but it failed of ratification in Canada. The Reciprocal Tariff Act of 1934 is a more ambitious plan. This Act empowers the President of the United States to raise or lower tariffs for bargaining purposes by not more than fifty per cent, and also provides that for a period of three years (extended for three more years in 1937) the President shall have the power to negotiate reciprocal tariff agreements without action by the United States Senate. With this unusual grant of power seventeen agreements had been completed by April 1938.[6] While the purpose of the new law was to revive foreign trade, the Federal Trade Agreements Committee, which was charged with the task of formulating the new agreements, sought to prevent any undue weakening of the American protective tariff system. This policy was carried out by the following two broad principles: First, concessions were granted only where the total American imports of a commodity involved were shipped primarily from the country party to the agreement under consideration. In 1931 on the average 71 per cent of each individual commodity imported into the United States was exported from *one country* abroad and the balance from all other countries. Thus it is possible to avoid giving concessions to countries not parties to an agreement by only negotiating with the country

[4] F. W. Taussig, *Free Trade, the Tariff, and Reciprocity* (1924), pp. 121–122.

[5] See P. T. Ellsworth, *International Trade: Theory and Politics* (1938), Ch. VI.

[6] *Ibid.* These countries were Belgium, Brazil, Canada, Colombia, Costa Rica, Cuba, Czechoslovakia, El Salvador, Finland, France, Guatemala, Haiti, Honduras, The Netherlands, Nicaragua, Sweden, and Switzerland.

primarily interested in the exportation of each specific article. Second, the committee has sought to avoid giving concessions to commodities that are "directly in competition" with American industry.

Our new trade policy appears to have been rather successful. In 1936 imports from countries with which agreements had been consummated increased nearly twice as fast, and exports nearly three times as fast, as our foreign trade with other countries. The United States has obtained a powerful weapon for trade development and it is to be hoped that this new weapon will be utilized with vigor in the interest of better trade relations.

C. Other Barriers to Free Trade

The Growth of Trade Barriers Since 1929.—A survey of world trade relations reveals a discouraging outlook for the proponents of freer trade. Trade barriers are increasing, especially since 1929. Even England, the former stronghold of free trade, has adopted a general tariff and protection is in ascendancy. The Imperial Economic Conference at Ottawa, Canada, resulted in considerable extension of the tariff system, and extended trade preferences among the various units of the British Empire. In the United States, the Smoot-Hawley Tariff of 1930 once more raised tariff rates. This action induced direct retaliation from abroad.

The pressure for increasing control over foreign trade has brought into operation many new techniques and old techniques have been utilized with increasing vigor. It is difficult to appraise the effectiveness of indirect restrictions, such as voluntary boycotts against foreign products, clauses inserted in loan contracts requiring the expenditure of the borrowed funds within the lending country, onerous inspection regulations at ports of entry, and freight rate discriminations. But several direct controls have been very effective, namely, the quota system, raw material exportation control, and foreign exchange control. These merit some analysis.

The Quota System.—Unwillingness to pay a duty is the only obstacle to the importation of goods into a country which protects industry with tariffs. An absolute limitation on imports can be secured by the use of import quotas. The quota systems that have been used, and are now in use, vary widely, ranging from a simple governmental decree which fixes the amount of a specified commodity that can be imported in a given period (frequently three months), up to elaborate systems of licensing importers and the development of agreements between foreign and domestic competitors as to the division of the domestic market between the two groups. Usually the volume of imports is limited either in accordance with the volume of goods brought into the country during specified earlier years, or on a basis of the relative volume of imports from various countries during unrestricted periods. In the first case the United States might decide that only 50 per cent of the average importation of hardware from abroad during the five year period of

1925–1930 should be permitted entrance into this country each year. An example of the second type would be a law which provided that only a specified amount of hardware would be admitted and that each foreign country could share in this trade in proportion to its average share of the total hardware importation between 1925–1930. Once the fixed quotas have been reached importation is stopped. This extreme method of control has become a favored form of trade restriction, since it is possible to achieve desired ends with a high degree of accuracy. The arguments for and against tariffs apply equally well to the quota system. Any justification of the movement must be found in the seriousness of the immediate problems of protecting the internal economy. In the case of France, it was argued that the conditions of the international market were such that it was impossible to stop the increasing flow of imports with tariff duties. Existing commercial treaties added to the difficulty of restricting the importation of specific goods. The directness with which the quota system attacks the problem of import restriction has been the fundamental reason for its use.

In passing we should note the effect of import quotas upon governmental revenues. As compared with tariff duties, import quotas have an adverse effect on revenues. If importation is restricted by a quota, the old tariff rates still apply, but to a smaller volume of imported goods, while if the same reduction is secured by an increase in tariff duties, the goods permitted entrance must pay a higher rate. The revenues of the state are therefore greater under the tariff method of restriction. Both systems must result in higher domestic prices since the supply of the commodities affected is reduced.

The Control of Raw Materials.[7]—The struggle for foreign markets has had its counterpart in the increased dependency of industrialized nations upon foreign sources of supply for raw materials. The consequence has been the establishment of various schemes for the control of raw material exportation.[8] The list of materials now, or in the past, under control is long. We have already examined the rubber and the coffee plans as illustrations of price control in Chapter XII. The proximate purposes of raw material control are the obtaining of public revenue, the increasing of profits in the production of raw materials, and the stimulation of domestic processing industries.

The United States is the largest consumer of the controlled products, but we have given scant attention to the problem; we have been more interested in protection against importation, and the securing of new foreign markets. Legal action has been taken against the American representatives of foreign

[7] The material in this paragraph is adapted largely from the excellent study of B. B. Wallace and L. R. Edminster, *International Control of Raw Materials,* The Brookings Institution (1930).

[8] See *ibid.,* p. 13. The list given by Wallace and Edminster, is as follows: natural camphor, cinchona bark, citrate of lime, coffee, long-staple cotton, Greek currants, Kauri-gum, mercury, nitrate, pearlshell, potash, pulpwood, quebracho, rubber, sandalwood, oil, silk, sisal, sugar, sulphur, and tin. Not all of these control schemes are still in effect; several have been abandoned.

monopolies under the anti-trust laws, as in the cases of the Dutch quinine monopoly and the Franco-German potash monopoly. The making of loans to countries restricting raw materials has been discouraged in a few cases, including coffee, potash, and rubber. Some attempts have been made to encourage domestic production, the development of substitutes, and the reclaiming of used materials; rubber and nitrates are here the best examples. However, little has been accomplished. A nationalistic approach cannot be effective even if it includes forms of retaliation. International action is necessary if a solution to the problem is to be found. The League of Nations has studied the problem and repeated discussion has taken place at international economic conferences. It is to be hoped that this movement will continue for there are many raw materials that can be added to the present list, and many possibilities for creating new sources of international friction lie dormant in the present situation.

Foreign Exchange Control.—Restrictions upon the private purchase and sale of foreign bills have become almost universal as a means of limiting imports. The proximate reasons for these drastic measures have been urgent monetary and budget considerations, the pressure upon governments to maintain or regain a balance of trade, and the desire to assure the importation of certain commodities (especially raw materials) in the face of rapidly shrinking imports. Significant elements in the situation were the uneven distribution of the world's monetary gold stocks following the world war, the pressure to make interest or debt payments, and the development of strong nationalistic movements within many countries.

The methods by which exchange control has been accomplished are numerous and diverse. The more direct forms range from mere public expression of the government's disapproval of capital exportation up to the complete elimination of private dealing in foreign exchange. Moral suasion usually proves ineffective unless a wave of national patriotism happens to coincide with its use and more effective legal means must normally be adopted. In some cases the exportation of capital is prohibited; an embargo is placed on shipping securities, or on moving liquid bank balances. In other cases the control reaches beyond capital transfers and seeks to limit commodity exports. Business men are compelled to secure permits before they can purchase foreign drafts and the government is thereby enabled to allocate the available foreign exchange as it sees fit. The most extreme form of interference is that of entirely eliminating the free market and the establishment of a complete monopoly of all foreign exchange dealings by a governmental agency. Exporters must then sell, and importers must buy, their foreign bills from the authorized agency.

An interesting innovation, known as the *blocked account* system entered the international scene after 1931. Briefly stated, the purpose was to enable solvent domestic debtors to satisfy their foreign obligations in domestic cur-

rency and thereby relieve them of the necessity of purchasing foreign exchange. Germany was one of the most ardent champions of this plan. Suppose that a German firm owes ten thousand dollars to an American manufacturer from whom goods have been purchased. Under the blocked account plan the German government authorizes the debtor firm to pay the amount of its obligations into a bank account *in marks*. This account is then placed to the credit of the American firm and the German government, through its central bank, determines the conditions under which these credits can be transferred to the United States. The regulations controlling such transfers are extremely complex and vary according to the category under which the source of the blocked account falls. The difficulties are such that the American firm would be quite willing to sell its rights to the account at a loss in order to reclaim at least a part of the funds due. Titles to blocked accounts are frequently bought and sold both openly and surreptitiously, often at a large discount. The use of the blocked account has spread over most of Europe and many Latin-American countries.

The practice of exchange control has led logically to international agreements known as the *exchange clearing system*. This plan seeks to restore trade between two countries by an agreement that is not far removed from the direct bartering of goods and services. The bilateral agreement of Switzerland and Hungary in 1931 was one of the earliest of these agreements. Under this agreement a Swiss importer of Hungarian goods was required to make payment in Swiss francs into a special account within Switzerland. Likewise a Hungarian importer of Swiss goods made payment into a special account within Hungary in Hungarian pengoes. A Swiss exporter to Hungary then received his money in Swiss francs by payment from the Swiss special account and Hungarian exporters received their money from the Hungarian special account. Periodically the two central banks cleared their special accounts and if they proved to be unequal, made agreements to take care of the difference by loans, by stimulation of exports, or by limiting exports. The purchase and sale of foreign exchange by individual importers or exporters was completely eliminated. Past financial difficulties that had proven serious obstacles to the restoration of trade were removed by this procedure and foreign trade between the two countries was given a fresh start.

Prospects for the Future.—Unquestionably the majority of economists view with alarm the accumulating barriers that have been attached to the free flow of foreign trade. These governmental ventures into the field of applied economics have contributed towards the drying-up of the commerce of the world. The freedom given foreign trade up to 1914 developed each country among the lines of its own specific advantages. Geographic division of labor was a marked characteristic of the world economy. In the post-war period these specialized industries were gradually cut off from their customary markets. England found herself in possession of extensive textile mills, iron

and steel plants, and great shipyards (all fixed, specialized equipment), but the markets for textiles, iron and steel, and ships for which this equipment was created soon melted away. The United States, with broad stretches of superior agricultural land and the best machine-tool industry in the world, found itself unable to sell wheat, cotton, and machinery abroad. In varying degrees a similar situation faced other countries. A wonderful productive machine, capable of contributing to the advancing of human standards of living, was reduced to a low level of performance by the breakdown of trade relations. Unquestionably a case can be made in defense of each restrictive act, for every step was taken for what appeared at the time to be valid and urgent reasons. It may be asserted that internal economic conditions might have been far more serious if international trade had not been sacrificed. There are times at which the finest physician finds it necessary to prescribe dangerous drugs to save his patient's life. But the admission of the validity of this defence should not be used as a barrier to a return to a more efficient economy. Trade barriers should be relaxed at the earliest opportunity. This will require international coöperation. It is very doubtful that the degree of freedom existing before 1914 will soon be restored. The technical machinery of control has become an integral part of the politico-economic organization of a modern state and it is hard to believe that this new power will be completely surrendered. However, there is no good reason why governmental regulation need *obstruct* trade; if attention is paid to economic principles, and policies are formulated in accordance therewith, it should facilitate it. Concerted action of the great powers can, if intelligently guided, restore considerable freedom and pave the way for a renewed advance in living standards thru a more efficient world economy.

Summary

Every action that restricts the freedom of trade tends to reduce the gains of geographic specialization and consequently the real income available for the world's consumption. Tariff duties force the consumer to pay higher prices and thereby protect home producers from the competition of cheaper foreign products. Many arguments for the protection of industry are clearly fallacious. The balance of trade argument, that an excess of exports is "favorable" to a nation, is a survival of mercantilism; it confuses money with wealth. The protection of infant industries is theoretically sound if the industry is one to which the nation is well adapted, but this argument at best justifies only temporary protection. The argument that protective duties create new markets for domestic products fails to recognize that a domestic market is merely substituted for a foreign market. The claim that high American wages are a result of, and depend upon, our protective tariff policy confuses high wages per man with high labor costs per unit of product. Tariffs lower real wages by increasing the prices of the commodities workers

must buy. The argument that protection increases employment fails to recognize that an additional industry is not created, but one industry is substituted for another. There is some truth in the claim that free trade may result in a country specializing its industries too narrowly,—tariffs diversify industry and add thereby to the stability of industry. There is also some merit to the argument that a nation should be self-sufficient, as long as the danger of war exists. Protection against dumping is valid in principle, but difficult to carry out in practice. If we must protect industries, bounties are preferable to the tariff duties.

The procedure under which tariff bills originate and finally become a law is not conducive to industrial efficiency. A strong and efficient tariff commission would aid materially in developing a scientific, uniform tariff policy. The principle of equalization of costs has not taken the tariff out of politics. The growth of commercial treaties providing reciprocity and "most favored nation" treatment are moves in the direction of freer trade.

Trade barriers have been increasing rapidly since 1929. Higher tariffs, import limitation by the quota system, control of the exportation of raw materials, and foreign exchange restrictions have become common nationalistic policies. Governmental ventures into the field of foreign trade control are contributing towards the drying-up of the commerce of the world. International coöperation is necessary in the interest of freer trade.

SUGGESTIONS FOR FURTHER READING

The writings of Professor Frank W. Taussig supply an abundance of excellent material on the problem of the protection of industry. See especially his: *Tariff History of the United States* (8th ed., 1931); *Free Trade, the Tariff, and Reciprocity* (1924); and *Some Aspects of the Tariff Problem* (3rd ed., 1931). A unique discussion of protection is that of Josef Grünzel, *Economic Protectionism* (1916). *International Trade* (1904), by John A. Hobson, and *Tariff, The Case Examined* (1931), by Sir William Beveridge, *et al.*, give interesting surveys of the problem from the English point of view. The United States Tariff Commission's publication, *Reciprocity and Commercial Treaties,* is a useful statement of that question. See also *Foreign Tariffs and Commercial Policies During 1932,* United States Department of Commerce *Trade Information Bulletin No. 812.*

A number of excellent texts have recently appeared covering the entire field. *International Trade: Theory and Policies* (1938), by P. T. Ellsworth is very well done and especially strong in theory. Broader in scope is the excellent text by John P. Young, *International Trade and Finance* (1938). *International Trade* (1938) by H. B. Killough and *The Principles of International Trade* (1932) by H. M. Sinclair are also satisfactory. Very satisfactory short treatments are F. W. Fetter, *Tariff Policy and Foreign Trade,* an essay published in *Facing the Facts* (1932), Chap. III; Sumner H. Slichter, *Modern Economic Society* (1931), Chap. XXIX; and F. W. Taussig, *Principles of Economics* (3rd ed., 1921), Vol. I, Chap. XXXVII.

CHAPTER XVIII

INTERNATIONAL FINANCE AND ITS PROBLEMS

A. International Trade and International Debts

The Field of Study.—No phase of economic organization was more profoundly affected by the World War than international trade. Trade between nations has become entangled in the meshes of tariff barriers, fluctuating price levels, inter-allied debts, war reparations, and imperialistic policies. At the root of all these questions lie fundamental principles of economics as old as the science itself. The need for sound thinking and calm, dispassionate judgment is imperative if sound policies are to be formulated for the future. Here the interests of the business man, the economist, and the statesman all converge, for political as well as economic questions are involved. We cannot hope to make a detailed study of all the economic problems that have come to the front in the international field, but a careful examination of the theory and problems of international debts, and of so-called economic imperialism, taken together with our previous analysis of the problem of protection of industry, should give a very satisfactory picture of the more important questions involved. Wars and rumors of wars hover in the background.

The Relation between International Trade and Foreign Investments.—Lending and borrowing between nations takes place on a very large scale, usually private individuals or corporations in one country lending to or borrowing from private individuals or corporations in other countries. At times, however, loans are made by one government to another. This occurred frequently during the World War. How does a nation borrow from or lend to another nation? The uninformed man immediately replies, "By making a loan of money." But the very simplicity of this answer serves but to obscure the real nature of the process. The flow of capital into or out of a nation takes place thru the medium of the trade balance. To illustrate: suppose that capitalists in the United States are investing large sums of money in Europe, by purchasing the stocks and bonds of European corporations. The funds thus transmitted abroad *might* take the form of money; but it is much more likely that they will consist of credit instruments which the foreigners will use to purchase commodities or services in the United States. The result will be a flow of exports[1] from this country to the countries in

[1] The terms *exports* and *imports* will be used in subsequent discussion to include both merchandize and services.

which we have invested. Our loan has taken the form of an export balance of goods. The industrial expansion and railroad building in the United States, following the Civil War, was in part financed in this manner by foreigners who invested in the United States. They bought our railroad and industrial securities, and we used the credits so put at our disposal to purchase needed supplies. What actually took place was the importation into the United States, from European nations, of large quantities of iron and steel products, textiles, and other commodities. We borrowed merchandize and services. What we gave in return were certificates of ownership and indebtedness. The loans were consummated thru the medium of trade relations.

The Cycle of Investment.—The manner in which foreign investments affect trade relations can be well illustrated by tracing the stages of trade thru which a new country passes during the course of its economic growth. As a new country develops, it passes thru four different phases, with reference to international investments. The inauguration of each new stage carries with it a change in the character of the nation's trade balance. For purposes of simplicity, we may designate these stages as the immature debtor, the mature debtor, the immature creditor, and the mature creditor stages. Such a classification is open to the criticism that it oversimplifies the actual nature of world trade, but it will serve to bring out into bold relief the economic forces at work.

The Immature Debtor Stage.—A new country requires a variety of commodities to develop its territory. To secure them, it must rely in a large measure on the older and more industrialized countries. The commodities so imported can be paid for in part by the exportation of home products, probably raw materials and foodstuffs, but a very large portion must be financed on borrowed funds. It follows that, for a time, such a country must import far more merchandize than it exports. It must have an "unfavorable" merchandize balance of trade. Under such conditions, foreign capital is being imported. The United States was in this stage up to the year 1874.

The Mature Debtor Stage.—After an individual has borrowed, he becomes a debtor and must annually pay interest on his debt; and eventually he must repay the principal itself when the period of the loan expires. A nation that has borrowed abroad must likewise pay interest annually and prepare for the eventual repayment of principal. As time passes and the annual interest charge grows with increases in the total of borrowed funds, a point will be reached where payment of interest will exceed the amount of annual new borrowings negotiated abroad. The borrowing nation has become a mature debtor and will then be obligated to pay foreign countries more than can be offset by current exports and new borrowings. There must consequently develop a shift in the international balance. Exports

must exceed imports, so that credits may be built up to be used in meeting interest payments and maturing foreign obligations. Thus a "favorable" balance of trade must be established. If exports and imports just balanced, there would be no surplus credits with which to make the required payments. The United States reached this mature debtor state in 1874. In that year our international trade balance changed from an "unfavorable" to a "favorable" one, and the total amount of our annual interest payments abroad exceeded the value of new investments made within our borders by foreign investors. We remained a debtor nation down to the outbreak of the World War. During all that period, a large "favorable" balance of trade was maintained.

The Immature Creditor Stage.—Gradually, economic development in a new country establishes industry on a firm and efficient basis, and the more prosperous of its citizens begin to look abroad for investments more profitable than those open in the home market. Investments abroad gain in volume as economic progress advances, until they may exceed the holdings abroad of domestic securities. Capital has then been exported in greater quantities than it has been imported. To accomplish this, a "favorable" international trade balance must exist, for the ability to transmit surplus funds abroad for foreign investments depends on the excess of exports over imports. England had a "favorable" trade balance during the period in which it was accumulating its enormous foreign investments prior to 1821.

The Mature Creditor Stage.—The accumulation of foreign investments places a country finally in the mature creditor stage, for it must then receive interest payments and eventually repayment of principal. This stage is reached after the amount of annual new loans made is exceeded by the interest payments and maturing old loans from already existing foreign investments. To receive such payment imports must exceed exports, so that a balance will be created that may be charged off to the credit of the debtor nation. This has been the condition of the English trade balance for the last century. During that long period England has maintained an "unfavorable" trade balance. The reaching of this stage may be postponed indefinitely, however, if a nation continues to reinvest abroad maturing interest and principal, or if ultimate repayment never takes place.

To summarize, we will generally find that, (1) an immature creditor nation has a "favorable" balance of trade and an immature debtor nation an "unfavorable" balance; and (2) a mature creditor nation generally has an "unfavorable" balance of trade, while a mature debtor nation has a "favorable" balance. This is what the economist means when he says that changes in the volume of foreign payments, even tho they arise thru foreign investments, can take place only by altering the relation between the exports and imports in a country's international trade balance.

Foreign Investments and the Mechanism of Foreign Exchange.

—The process by which trade balances are actually altered thru investments abroad can be appreciated most easily by tracing out the effects of a new loan. Let us assume that exports from the United States to England just balance imports, and let us assume, further, that these two countries trade only with each other. Suppose now that English business interests seek to float a large loan in the United States. According to the principles we have just studied, the United States would then become an immature creditor nation and should develop a "favorable" balance of trade; that is, it should export more than is imported. How will this condition be brought about? Each American citizen who wishes to invest in the new English securities will place in his own bank at home the funds with which he wishes to make the purchase. The bank will then transfer these funds abroad to purchase securities, either (1) by purchasing a draft on England or (2) by ordering an English correspondent banker or a broker to draw against the American institution the necessary sum. In either of these cases an increase in the demands for bills of exchange on England will arise in the United States, and conversely, there will be an increase in the supply of bills on the United States abroad. This extraordinary American demand for bills will drive up the rate of British exchange; bills will sell at a premium. Now this rising exchange rate will have two effects. First, it will stimulate exports from the United States and discourage imports to the United States. This will be true because the pound, being at a premium, will exchange for more dollars than previously. Englishmen will find that pounds will temporarily buy more in the United States, and Americans will find that their dollars will temporarily purchase less in England. However, this effect will usually be slight, for exchange rates do not ordinarily fluctuate very widely. Before they can move very far, a second phenomenon occurs. The premium on the pound will induce the exportation of gold from the United States. This will lower the price level in the United States and raise the price level in England, making England a poor place for Americans to buy in, but making the United States a good place for Englishmen to buy. The alteration of the price level so brought about will have a tendency to stimulate exports from the United States and, at the same time, curtail imports into the United States. Thus there are two reasons why economic forces will tend to develop an excess of exports over imports; the "favorable" trade balance which we previously stated to be necessary will be established. If one looks behind the technical mechanism of exchange, he will find that Americans have been exporting larger quantities of commodities and services, accepting foreign securities in payment thereof.

Trade Balance Adjustments Since 1918.—Recent inductive studies of the adjustment of international trade balances have led many economists to modify considerably the explanation just presented. It is argued that the automatic and uncontrolled process of adjustment no longer holds true.

Not only in paper standard countries, but even in gold standard countries the assumed free movement of gold and the resulting adjustments in price levels have been severely restricted. Central banks, by the control of discount rates and open market transactions, exercize effective control. Barriers to trade are increasingly in evidence. The growing importance of short-term capital movements has become a vital factor in short run adjustments. These short-term credit items may be in the form of foreign bank balances, or such credit instruments as bankers acceptances. A slight advantage in interest rates, an advantage caused by fluctuating exchange rates, or the fear of an incipient alteration in monetary policy may cause a "flight of capital" to begin by the withdrawal of bank balances and the liquidation of short-term loans.

Most authorities are very cautious about drawing conclusions that put the automatic adjustment theory too far in the background. This is especially true when long-term adjustments are under consideration. But the student who seeks to apply economic principles to the problems of contemporary international relations must keep in mind the limitations placed upon the automatic adjustment of trade balances in a world in which the various forms of conscious control and international tension are rampant. However, short-run variations and governmental interference must not obscure unduly the operation of fundamental economic principles. A good case can be made for giving greater attention to the problems of control and less attention to the problems of automatic adjustment. But no case can be made for the confusion that results from a lack of clear differentiation of the two problems.

The Foreign Investment Position of the United States.—At the outbreak of the World War, the accumulation of American securities abroad had reached a total estimated at $5,500,000,000, which gave rise to an annual interest charge payable abroad of about $275,000,000. American investments abroad amounted to approximately $1,500,000,000, interest receivable on which was only $75,000,000. We therefore had to pay annually a net interest balance of about $200,000,000. During the war heavy demands were made on American industry for war munitions and other war supplies. Exports expanded by leaps and bounds. Between 1914 and 1919 the excess of exports over imports had reached a total of over $15,000,000,000. This huge export balance was not paid for by Europe, but was financed by the return of American securities held abroad and by new loans floated in the United States. Some of these loans were marketed privately by banking institutions, but the bulk of them were financed by direct loans made by the United States government. These direct loans of the federal government were placed to the credit of the various nations and were drawn upon gradually for the purpose of purchasing supplies in the United States. We actually loaned not money, but commodities. Our government obtained the necessary funds to make the loans by the sale of Liberty Bonds to American

citizens. The following table gives the total funded indebtedness of foreign governments to the United States and the total payments thus far received:[2]

FUNDED INDEBTEDNESS OF FOREIGN GOVERNMENTS TO THE UNITED STATES AS OF NOVEMBER 1937

Country	*Total indebtedness (payments on principal deducted)*	*Total payments received*
Armenia	22,607,112.37	
Austria	25,998,190.81	862,668.00
Belgium	436,316,778.03	52,191,273.24
Czechoslovakia	165,620,270.43	20,134,092.26
Estonia	19,856,001.51	1,248,432.07
Finland	8,434,521.08	4,868,891.77
France	4,101,220,183.67	486,075,891.00
Great Britain	5,185,730,763.50	2,024,848,817.09
Greece	33,865,722.80	3,778,384.01
Hungary	2,292,025.39	468,466.32
Italy	2,018,473,707.31	100,829,880.16
Latvia	8,178,084.48	761,549.07
Lithuania	7,318,861.80	1,237,956.58
Nicaragua	484,921.24	168,575.84
Poland	248,481,344.92	22,646,297.55
Rumania	63,961,670.18	4,791,007.22
Russia	375,731,962.72	8,750,311.88
Yugoslavia	61,625,000.00	2,588,771.69
Total	12,786,196,128.24	2,736,251,265.75

In the years following the War, private long-term foreign investments by American citizens increased at an astonishing rate, so that by the end of 1930 the total outstanding was about fifteen billion dollars.[3] About one-third of this huge sum was invested in Europe and about one-fourth in Canada. Since 1930 the total has decreased to approximately twelve and one-half billion dollars. Therefore the grand total of public and private long-term foreign investments of the United States may be estimated as over twenty-five billion dollars. The total interest charge at three per cent would amount to three-quarters of a billion dollars.

The War Debts and Our Trade Balance.—The United States is today a creditor nation. What does this situation mean in terms of America's future trade policies? There are only three methods by which any debt can be paid. They are: first, money payment in cash, which in international trade means gold; second, payment by the rendering of services; and third, payment in commodities. As to the first method, payment in gold, there is certainly not enough gold in Europe to meet the obligations. And even if this were not true the United States is not at all

[2] Adapted from the *Annual Report of the Secretary of the Treasury on the State of the Finances,* June 30, 1937.

[3] *A New Estimate of American Investments Abroad* (1931), United States Department of Commerce *Trade Information Bulletin No. 767.*

anxious to receive such a stream of gold. The rising price level that might result from it over a long period of years would increase the cost of living and cut off our export business by making the gold prices of commodities prohibitive to foreign purchasers. As it is, the gold supply of the United States is large. As to the second method of payment, the rendering of services, the United States is tending more and more to perform the more important forms of services for itself. We are seeking to build up a banking and insurance center in New York and are encouraging the development of our merchant marine by government loans for ship construction, by subsidies for the carrying of mail, and by the sale to American shipping companies of vessels built or acquired by the government during the World War at less than their cost of construction. The expenditures by American tourists abroad help our debtors to some extent, but this sum will be far from sufficient in the future to meet the obligations of the latter. We are therefore driven to the conclusion that the only way for the United States to receive payment is by the importation of commodities from abroad. We loaned commodities, and we must accept commodities in payment if we are to collect the debt at all. This will necessitate the establishment of an "unfavorable" balance of trade. Our ability to receive foreign payments is limited by the excess of imports over exports.

The Debt Funding Agreements.—As evidence of its direct loans to foreign governments, our government held demand notes signed by the official representatives of the debtor countries. Following the close of the war, it was apparent that the debtors could not make payment in conformity with the original terms of the loans, and it became necessary to make adjustments that would make possible future settlement of the obligations. Thirteen agreements for the funding of the debts were negotiated between May 1, 1925, and May 3, 1926, by the World War Foreign Debt Commission, acting under authority granted by Congress. Agreements with two countries, Austria and Greece, were negotiated by the Secretary of the Treasury after the Commission had concluded its work in 1927. In writing the new agreements, the Commission took into consideration the capacity to pay of each debtor. In most cases the principal sum was not changed but the interest rates charged were materially reduced. The original loans carried 5 per cent interest, but the general average interest rate under all the agreements is 2.1 per cent.[4] Payments are to be spread over a period of 62 years. Since little had been paid, either to the account of principal or interest, it was necessary to fund accumulated interest along with the principal. The payments on account of principal and interest since the funding agreements went into effect have been shown above. However, these payments do not indicate a capacity to pay, for the debtor nations have floated new private loans in the United

[4] *Ibid.*

States totalling a much larger sum than their payments to the United States. In other words, the net total of indebtedness has increased rather than decreased. The Hoover Debt Moratorium, noted below, gave relief for one year, but when the agreement terminated on June 30, 1932, several debtor governments gave notice of their intention to postpone payment in whole or in part. Only six countries made payments due December 15, 1932.[5] A concerted movement then developed abroad demanding general revision; in the interim President Roosevelt accepted "token" payments of 10 per cent. The Johnson Act, in April 1934, forced the issue by prohibiting the granting of new loans to any foreign government which is in default of its obligations to the United States Government. On June 15, 1934, all the debtors were in complete default, with the exception of Finland, which country paid in full. This unfortunate condition continued thru 1937.

Our Future Debt Policy.—What, then, should be the future policy of the United States with regard to these outstanding foreign investments incurred during and following the war? Certainly the alternatives that are open are clear. First, if we desire our European debtors to pay us to the full extent of their ability, we must accept imports in quantities large enough to give us an "unfavorable" trade balance sufficiently great to charge off annually the required payments. This can be accomplished either (1) by increasing imports much more rapidly than exports, (2) by reducing exports, or (3) by reducing exports slightly and increasing imports considerably. In any case it would require a complete reversal in our traditional tariff policy, for it would be necessary to lower, if not to eliminate, our protective tariff in order to permit the inflow of goods. A second alternative is to cancel the loans in whole or in part. This policy would permit the maintenance of the protective tariff. Finally, the debts might be liquidated in return for political favors such as the reduction of armaments, trade privileges, or the transfer of territory. This third alternative really falls outside our field of study into that of politics. To the economist it is simply one form of cancellation. Little can be hoped for any approach to the problem that makes such a direct challenge to foreign nationalism.

What are the merits of the first two alternatives? In favor of cancellation, it has been argued, first, that the sums we loaned the Allies should be considered our contribution to the winning of the World War. If we had not sent Europe the large quantities of war supplies that enabled them (with our assistance in the field) to end the war in 1918, we would have been forced ourselves to carry a far greater burden of actual conflict on the battlefield in 1919. We would not only have been forced to spend large sums of money to support our army in Europe, but we would also have suffered a heavy loss in human lives. In other words,

[5] Czechoslovakia, Finland, Great Britain, Italy, and Lithuania made full payment, and Latvia a part payment.

by financing our Allies in 1918 while they paid their share in blood, we were spared the necessity of placing a large army in the field to win a victory in 1919. Secondly, it has been argued that our own self-interest dictates cancellation, for the effect of lowering the protective tariff to permit the inflow of foreign goods would be disastrous to American industry. The nations that owe us money are in approximately the same stage of economic development as the United States, and the goods that they would send us would, consequently, enter into direct competition with American industries. The products we gave them were cannons, shells, powder, wheat, etc.; but the products we would receive would be machinery, textiles, cutlery, and similar manufactured goods. Some writers have said that this can be avoided by triangular trade; Europe can send her manufactured goods to Asia, Africa, and South America, and we, in turn, can accept raw material from these areas. The difficulty here is that our own export trade will be correspondingly reduced; our exporters will face bitter competition in those foreign markets. Thirdly, it is argued that at least a part of the Allied war debt was for humanitarian purposes, primarily the relieving of distress in Europe following the closing of hostilities. While the funds loaned for this purpose were relatively small, yet to include them in our demands for payment does not show a very charitable spirit. In the fourth place, during the period in which the loans were extended, the price levels of the world were much higher than they are today. The manner in which a falling price level places a burden on debtors has already been brought to the attention of the student in Chapter XV. If the war debts were scaled down to allow for the deflation of prices, the total obligation would shrink considerably. And finally, practically all economists who have studied the problem, whether they be American, English, French, or German, agree that it is extremely doubtful that the direct loans made by our federal government and the private loans made subsequently can both be repaid in full with interest, even if the debtors make every conceivable attempt at payment and the creditor extends every opportunity for receiving it. The shifts required in the international trade balance would be enormous. We have much more to gain by cancellation of the war-time obligations and assisting Europe to restore its economic position than we have in demanding payment in full, for American industries are spreading out into foreign markets, and the success of this expansion in the future will in part depend on the restoration of foreign trade. In spite of these arguments, the avowed policy of our government is that of demanding payment in full. It is claimed that the obligations were legitimate business transactions and that failure to repay would ruin the credit status of the debtors and place an unfair portion of the burden of the war on the American tax-payer. In the opinion of the present writers, this is not the best policy for America to pursue. There

is little to be said in its favor, either from the point of view of equity and justice or from that of economic expedience. Our best policy both from a moral and pragmatic standpoint would be complete cancellation of the war debts. The payments we have already received, amounting to more than two and a half billion dollars, seem destined to be all we shall receive and the sooner the true situation is faced, the sooner constructive international action will be possible on vital pending economic questions.

The German Reparations Problem.—When Germany laid down her arms at the signing of the armistice, she agreed to pay for all damage done by her armies to civilian population and civilian property. The Treaty of Versailles failed to fix the amount of this obligation, but provided for a Reparations Commission to settle, at a later date, the amount that Germany should pay. In May 1921 the Reparations Commission set the amount and the Germans were ordered to pay 132,000,000,000 gold marks as reparations for damage done during hostilities. Interest and sinking fund charges on such a sum would amount to nearly $1,900,000,000 annually. We have already seen that payments by one country to another can be made normally only by means of an excess of exports over imports. In order to pay reparations the German government would have to secure drafts on foreign countries. These drafts would normally not exist unless goods had been exported from Germany to other countries, giving rise to claims of German exporters on foreign importers. Economists have believed, from the time of the announcement of the sum agreed upon as Germany's obligation to the victorious Allies, that it would be impossible for Germany to meet the obligation. Even if German internal economic conditions were such as to make it possible for the government to obtain control over wealth within Germany sufficiently large to meet its annual payments of reparations, it would nevertheless be impossible to transform that wealth into a form that could be used to make payments abroad. Not only was the sum demanded enormous, but the ability of Germany to pay was reduced. She lost some of her most valuable territory, gave up her merchant marine, and faced economic trade barriers all over Europe. At one time Germany offered to rebuild part of northern France by bringing in German labor and German materials, avoiding thereby the difficulty of making payments thru trade channels; but French business men protested so strongly that this method of meeting her obligations was abandoned. Attempts to increase German exports were strenuously resisted in the Allied countries. Some payments were made by resorting to the very questionable device of inflating the currency. The German government printed large issues of paper marks and gullible investors thruout the world (but especially in the United States) purchased them as a speculation. This gave Germany a supply of exchange on foreign countries with which to make payments. The

amount of these foreign purchases of German paper money roughly just about equals the actual payments made by the Germans to the Reparations Commission of the Allies up to 1925. The foreign speculators lost all their money, for the mark depreciated until it became almost worthless. Germany was forced to default its payments to the reparations commission time and time again.

The Dawes Report.—In an attempt to place the reparations question on the road to permanent settlement a commission of experts was appointed by the Reparations Commission to study the whole question and make definite constructive suggestions. The result was the famous Dawes Report. The commission assumed the task of determining: first, the means by which the German budget might be balanced and the German currency stabilized; second, the capacity of Germany to make foreign payments in the immediate and remote future; and third, the methods by which these foreign payments could be transferred to the credit of the Allied nations to whom they were due. The Report provided for the reorganization of the Bank of Germany, to be managed by the German Government, but also supervized by a general board on which Germany, France, Italy, Belgium, the United States, Switzerland, and Holland were represented. Reparations payments by Germany were to be made to this German bank and there placed to the credit of the Reparations Agent. The sum to be paid was fixed at $238,000,000 the first year, to be increased to $595,000,000 by the fifth year. Payments after the fifth year were to be increased if an index of German prosperity, provided for in the report, indicated that German economic conditions were such as to warrant larger payments being made. To guarantee the flow of German reparations, provisions were made to balance the German budget and to mortgage the German railroads and industries. Once the Germans made payment to the new bank their obligations in that direction ceased, and it was the duty of the Reparations Agent to transfer the funds abroad. This placed the onus of accepting payment on the receiving nations. Thus, the report clearly recognized that the problem of making payments abroad was not merely the collection of funds within the debtor country, but also the far more difficult problem of transferring those funds abroad thru trade channels.

The Liquidation of the Reparations Problem.—*The Young Plan.*—The failure of Germany to make the adjustments required under the Dawes Plan made a revision necessary and in 1929 the Young Plan was formulated in Paris. The indeterminate annuities and the prosperity index of the Dawes Plan were discarded; both the number of annuities and the amounts were definitely fixed. Payments were to be spread over two periods, the first 37 years and the second 22 years, making a total of 59. During the first period the annuities were to average about 2,000,000,000 marks. During the second period they were to range from about 1,600,000,-

000 marks to 1,700,000,000 marks for 19 years and then drop to about 900,000,000 marks in the last three years.[6] Of these payments, 612,000,000 marks annually were classed as unconditional obligations, while the balance could be postponed for not more than two years. In place of the old Reparations Commission, a new agency called the Bank for International Settlements was established for the collection and distribution of the German payments; the various agencies of control created within Germany by the Dawes Plan were abolished. In addition to its services as trustee for the creditor powers, it was hoped that the new institution would provide financial facilities for the development of international trade.

The Hoover Debt Moratorium.—Conditions in Germany failed to improve and by June 1931, complete financial collapse threatened. To protect the jeopardized economic stability of the world, President Hoover proposed a moratorium of one year covering all inter-governmental debts, reparation payments, and relief debts. This pronouncement of June 20, 1931, was later approved by Congress. The protest of France forced a modification of the originally announced plan, primarily with respect to the unconditional payments due from Germany under the Young Plan, but in general it was placed in operation. Some steps were also taken to halt the withdrawal of short-term credits from Germany. For the time being collapse was prevented.

The Lausanne Settlement.—The Hoover Moratorium, limited to one year, expired June 30, 1932. Before that date it was evident that Germany would be unable to resume her regular payments. The situation in all Europe had become increasingly critical. Trade barriers were increasing and a number of countries, following the lead of Great Britain, had left the gold standard. The outcome was a conference at Lausanne, Switzerland, in June 1932. The agreement signed stipulated that ratifications by the signatory powers was necessary before it went into effect. Meanwhile all war debt payments and reparation payments among the signatory powers were suspended. In a supplementary memorandum it was agreed that ratification should not take place until the creditor governments (*i.e.,* those to whom reparation payments were due) obtained a satisfactory settlement of their own outstanding obligations, presumably with Great Britain and the United States. It is very improbable, however, that the creditors will be permitted by Germany to revoke the agreement under any condition. As signed, the Lausanne agreement eliminated the annuities of the Young Plan and substituted 3,000,000,000 gold marks in German Government bonds. These bonds were to be delivered to the Bank for International Settlements. The rate of interest was fixed at five per cent, and to cover ultimate redemption a sinking-fund charge of one per cent was

[6] Data from Alvin H. Hansen, *Economic Stabilization in an Unbalanced World* (1932), p. 36.

assessed. The Bank for International Settlements was required to hold the bonds for three years and then attempt their sale.

The Lausanne Settlement practically liquidated the German reparations, but the entrance of Hitler on the German political scene completed the work. The German reparation question has ceased to be a major international issue. The final realization of loss has increased the reluctance of our former Allies to repay their war obligations to the United States and it is therefore probable that the United States will find it necessary either to accept a nominal payment as payment in full or to face the unpleasant prospect of having the debts perpetually outstanding. The United States has much more to gain by open cancellation. Certainly the present unsatisfactory status of open default by the debtor countries should not be permitted to continue indefinitely. Each date of payment the United States makes a formal demand upon the debtor nations and with equal regularity payment (with the exception of Finland) is refused. Meanwhile the large private investments of American citizens are in jeopardy and a source of international friction remains to handicap a return to freer trade.

B. Economic Imperialism

The Reasons for Imperialism.—Why have nations sought to gain control over territories outside their own boundaries, especially in those areas of the world called "backward" by the Europeans? The reasons are many, and may be conveniently classified as military, moral, sentimental, and economic. Military motives are well illustrated by British acquisition of territory along the route to India. Once India had been acquired, the danger of military aggression by future enemies, cutting off trade relations between India and the mother country, induced the acquisition of further territory. Egypt and the control of the Suez Canal were added to the British empire largely for this reason. Each extension of territory brings with it the necessity of taking over other territory to protect the first. Wars often lead to the acquisition of territory. Our Philippines were not sought for by our government, but their possession resulted from the Spanish-American War. The moral reasons for the spread of imperialism have been epitomized in the phrase, "Take up the white man's burden." The assertion of race superiority by western nations is well known. Every race thinks its culture superior to that of other races, and the carving out of empires beyond the outposts of civilization, especially in Africa, has been defended on the ground that it is all for the best interests of the native. The ignorant, lazy native, born with very low intelligence, must be taught the ways of progress, it is said, and this can be accomplished only under the enlightened leadership of the white race. Propaganda along this line has proved very effective in securing the support of the

ordinary citizen for imperialistic ventures in democracies, in spite of the fact that the treatment of the native is one of the blackest and bloodiest chapters in the spread of imperialism. The cruelty with which natives have been treated to secure business profits has been well known since the *exposé* of the Belgian atrocities committed in the rubber-producing area of the Congo. Even today the contract system, used for purposes of securing Chinese coolies for labor in the large plantations of the East Indies, is but a small step away from outright slavery. However, the assumption of the white man's burden has never been a primary reason for the extending of empires. Nations do not seek to expand their territory for "humanitarian purposes," but the argument has been used very effectively to justify the holding of territory once it has been acquired. We are being told today, for example, that the granting of absolute independence to the Philippines at the present time would be abandoning the native to his fate just when he needs us most. We must hold on to the islands, in the interests of the native, if not for our own welfare. It may well be that this is not the time to leave the Philippines to their own fate, but certainly the case is not strengthened in the minds of persons acquainted with the methods of spreading empires by raising once more the defense of the white man's burden. The third reason for imperialistic ventures, sentimental motives, is perhaps the least important of all, but they do play a part. The glory of conquest, war and adventure, the prestige of owning great colonies, appeal to our imaginations. "The sun never sets on the British flag" is a saying that makes many a Briton's heart swell with pride. The glory of a great empire gives excellent material for the building up of strong patriotic spirit. The present Fascist régime in Italy is using this appeal with very great success as a tool to fashion a new, strong, nationalistic Italy.

Economic Causes of Imperialism.—The fundamental cause of imperialism, however, is the desire for economic gain. Japan has sought to justify her recent advance in China as essential for her industrial survival. Business men seek the lowest markets in which to buy and the dearest markets in which to sell. Profit-seeking knows no boundary line, and business enterprizes are consequently carried very far afield. The economic basis of imperialism is confirmed not only by an examination of experience, but by the very utterances of European statesmen who have been most responsible for the development of that policy. Joseph Chamberlain declared that his colonial policy was guided by the principle that new markets shall be created and old ones shall be effectively developed. Commerce, he said, is the greatest of all political interests. French, German, English, and Italian statesmen have all been equally frank in stating publicly the reasons for their imperialistic policies. The great emphasis placed on the economic phases of empire-building is a natural result of the fundamental

changes that took place in economic organization, following the Industrial Revolution. Before that time, European nations were largely self-sufficient; their economic life was based upon agriculture, and foreign trade was but slightly developed. With the inauguration of the machine process, large-scale industries grew up, populations expanded, and trade thrived. The transformation from an agricultural to an industrial economy brought many new economic problems to the front, chief of which were the imperative necessity of a steady supply of raw materials and foodstuffs, and the creation and maintenance of a steady market for finished manufactured products. All the industrialized nations, especially in western Europe, have consequently turned their attention to those sections of the world where the extractive stage of economic development still prevails. It was hoped that, by taking over these areas, the home country would be assured sources of materials and supplies of food as well as a market for finished products. The belief that colonies existed primarily for the purpose of benefiting the mother country became the prevailing philosophy among European statesmen. The attempt on the part of England to prevent the growth of manufactures and shipping in the American colonies, and the attempt to stimulate colonial production of raw materials instead, led to the passage of the famous Navigation Acts, so familiar to the American schoolboy. The ultimate result was to bring about the struggle for independence. The American Revolution taught English statesmen the lesson that economic progress in outlying colonies could not be safely curbed; hence a more liberal policy was adopted. However, attempts to establish preferential tariff rates within the British Empire, in order to assist in the rehabilitation of English industries, have created some friction between the "mother" country and the colonies—Canada, Australia, South Africa, and India especially.

How Imperialism Spreads.—Governments rarely decide deliberately to engage in imperialistic activity. The process is far more subtle and gradual. Business enterprizers, observing possibilities for large profit by penetrating new undeveloped areas, establish the first contacts. As time passes, the subjugation of the native rulers, in order to guarantee peace and protection of the investments to be made, brings about the assumption of governmental powers by business interests. In the early days of colonial expansion, European governments went so far as to extend rights of government to private corporations; but, later, serious conflicts with natives, and with enterprizers from other nations, drew the home government into the situation and necessitated the assumption of responsible political control. The power of government has been freely placed behind the economic activities of its citizens. We have recently observed this process in operation in Mexico. American oil and mining interests in that country find themselves in conflict with the Mexican authorities.

As the intensity of feeling on both sides increases, American lives are apt to be placed in jeopardy, and property has been confiscated. The natural outcome of the situation is an appeal to Washington to protect the rights of American citizens in Mexico. Without entering into the merits of this particular case, intervention in Mexico would illustrate perfectly the process by which much of the spread of European imperialism has taken place.

In Africa each step led to another until the final result was the carving out of possessions and the establishments of empires. Once a small foothold was obtained, further additions were made in order to make the first occupation effective, and also in the name of explorations and scientific expeditions. Frequently loans were made to the local rulers, and the home government stepped in later to enforce the collection of the obligation. The conquest and annexation of territory on a large scale was prevented in Asia by the existence of dense populations possessing old, highly developed civilizations and culture. There was also a danger that rivalry between the various nations would result in war. This was especially true with the rise of the industrial and military power of Japan. In China imperialism took the form of economic penetration. Treaties with China gave trade privileges and control over financial arrangements, especially the collection of custom duties; but very little territory was annexed.

The Results of Imperialism.—The immediate gains of imperialistic policy quite obviously go to the individuals who own the business enterprizes that engage in economic activity in the outlying sections of the empire. Trade is carried on, in all but rare cases, by private individuals rather than by governments. To justify his position, the imperialist must prove that the gain not only accrues to business enterprizers as individuals, but also that in the end the well-being of the nation as a whole is increased. To justify governmental action involving heavy drains on the public treasury, heavy loss of lives, the defending of possessions, the risk of war with other nations, and the ruthless exploitation of native rights, an increase in social welfare must be clearly proved. Approached from this angle, the policy of imperialism has been unquestionably a failure. The primary defense, that of building up trade, has proven chiefly an illusion. The volume of the foreign trade with the outlying possessions has fallen far below anticipations. Writing in 1926, Professor Parker T. Moon stated that, "The vast French colonial empire absorbs only 13 per cent of the exports of France, and the outlying territories, dependencies and protégés of the United States take only one-ninth of the exports of the United States. Belgium alone, or Great Britain alone, is a larger consumer of French goods, and therefore more important as a market for France, than the whole French colonial empire. . . . Holland sells (1924)

about eight times as much to Germany as to the Dutch East Indies. Belgium in 1923 sold three times as much to Argentine, ten times as much to Holland, and almost twenty times as much to France as to the Belgian colony from which so much new foreign trade was expected. Japan in 1924–25 sold 15 per cent of her exports to Korea and Formosa; but the good will of her chief customer, the United States, is three times as valuable to her as the possession of these colonies. For the other empires, colonial trade is of still less relative importance. Germany before the war sold to her colonies about half of one per cent of her exports."[7] The great flow of raw materials and foodstuffs and the creation of great markets promised by statesmen with imperialistic leanings have failed to materialize.

For the most part, the actual results achieved have been on the liability side of the ledger,—the necessity of assuming heavy financial burdens and the development of international hostility and unrest. One of the most serious of all results has been the constant danger of war. If only one nation had imperialistic ambitions, there would be little to fear in this direction, but the existence of several nations seeking to accomplish the same end must inevitably lead to strife. The spreading out of empires brought the nations of Europe face to face in distant parts of the earth's surface. France, pressing on from Algeria thru the Sahara, met the British, pressing south thru Egypt, at Fashoda in Sudan, in 1898, and for a time warfare was imminent between the two nations. However, the French retired before the army of Lord Kitchener and later the tense situation was relieved by the recognition on the part of each country of the "rights" of the other in different sections of northern Africa.

The Agadir Affair.—The reality of the war risk of imperialism can be no better demonstrated than by the famous Agadir Affair, in 1911. This historic incident grew out of the competition between Spain, France, and Germany (primarily the latter two nations), for the control of Morocco. Northern Africa was considered exceptionally desirable, for not only did the possibilities of future trade look bright, but the possibility of colonization existed; the area was one of the few in Africa in which the white man could live. In a series of treaties between England and France, and France and Spain, provision was made for a partition of Morocco between Spain and France, should the opportunity arise to do so expediently. While these treaties were signed in secret, their content became known, and Germany at once made moves to give notice that her rights in Morocco were not to be ignored. The imperial yacht *Hohenzollern* put into the harbor at Tangier, and in a speech addressed to the Sultan of Morocco, the Kaiser stated quite clearly that the German gov-

[7] Parker T. Moon, *Imperialism and World Politics* (1926), p. 531.

ernment considered the Sultan to be an independent sovereign and that Germany stood ready to safeguard her interest in Morocco. German statesmen suggested a European Conference to settle the international status of Morocco. For a time France refused to participate, but finally the conference was held in the Spanish town of Algeciras. Morocco was declared to be independent, but subsequent acts of France disregarding the findings of the conference brought the issue again to a head. On the pretext of maintaining order, French troops were landed in Morocco. To offset this move, a German warship, the *Panther*, put into the port of Agadir, July 1, 1911. Lloyd George, in a vivid speech, declared that Great Britain was ready to go to war to prevent German occupation of Morocco. The outlook was very dark for a time, but finally Germany withdrew, and received in return a section of French Congo. Feeling ran high thru Europe for some time. The conflagration that broke out in Europe in 1914 had its beginning at Agadir.

The Remedy.—The rise of fascist dictatorships with imperialistic ambitions threatened again the peace of the world. Germany, having repudiated the treaty of Versailles, which not only stripped her of all her colonies but sections of her continental territory as well, demanded the return of her lost lands and in addition cast covetous glances towards the smaller nations to the East. Italy added Ethiopia to the empire by the force of arms and then, by support of the insurgent fascist Franco, sought a foothold in Spain. Japan by means of an undeclared war in China found an outlet for her imperialistic spirit. Under such conditions international "incidents" are inevitable and the outbreak of war is a constant risk. The lessons of past imperialistic ventures must be repeated; nothing permanent was gained by the terrible experience that began in 1914.

In the opinion of the present writers, the only remedy for the dangers of imperialism is some form of international organization. The struggle for markets, for sources of raw materials, and for emigration outlets vainly expected to relieve population pressure, appear to grow in intensity as the complexity of the world economy advances. Only a form of international control will remove the risk of war from the inevitably conflicting interests of sovereign nations. The collapse of the League of Nations was a tragic blow; it is to be hoped that a skeleton organization of the League will be retained in the hope that the world will at last adopt an intelligent approach to its problems. If we persist in our refusal to recognize the value of an organized body of nations, we must be prepared to find ourselves at frequent intervals standing at another Fashoda or Agadir. "If the war revealed one thing, it was the folly of building an international economic system in a world lacking in international organization."[8]

As to the business ventures of American citizens in foreign lands, our

[8] H. F. Fraser, *Foreign Trade and World Politics* (1926), p. 164.

government should make it clear that the investor takes his own risk. The business man knows, or should know, the risk he runs in operating an enterprize or making an investment in a small, backward nation. In fact, it is the existence of great risk that in a large degree explains the high yield that rewards success. To expect the average American citizen to supply military force, and run the risk of disastrous warfare, to protect an insignificant volume of trade with backward areas, is to make those who do not share in the profits protect those who do. The business man must be prepared to obey the laws of the country to which he goes, even if he does not himself approve of them. He does not have to invest in foreign lands. Only his desire for personal profit urges him on, and he therefore should take his own risks.

Summary

The international debts which arise thru foreign loans and investments affect the balance of international trade, for it is thru the movement of goods that principal sums and interest payments are transmitted between countries. The incoming funds of a new country in the immature debtor stage take the form of an "unfavorable" balance. Then the outgoing interest and principal payments of the mature debtor stage promote exports, establishing a "favorable" balance. If it passes into the immature creditor stage, its loans again produce an export balance, and when a mature creditor, incoming interest and principal payments cause an import balance. This is brought about thru fluctuations in exchange rates, and their effects on gold movements and the price level.

Prior to the World War the United States was a debtor nation with, consequently, a "favorable" balance of trade; but our loans to the Allies during and after that conflict have made us a creditor nation. Our debtors have been unable to pay us what they owe, so funding agreements, granting them more favorable terms, have been made. The only way we can collect these debts is by permitting an excess of imports over exports thru a lowering of our protective tariff. It is argued that we should cancel these debts to avoid the difficult industrial readjustments which a large influx of new imports (or a decline in exports) would cause, and to be fair to the Allies by bearing our just share of the war and reconstruction burdens. With the exception of Finland, all the debtor countries defaulted their payments in 1934. Our best policy both from a moral and a pragmatic standpoint would be complete cancellation.

The collection by the Allies of reparations from Germany has presented a similar problem. It was impossible to build up German exports in sufficient volume to make the payments, and the Allies did not want to receive the imports this would occasion. The Dawes Plan attacked this problem by setting up a schedule of funds which the German government was to deposit

to the account of reparations in Germany, but left it to the Reparations Agent to accomplish the transfer. The Young Plan made the payments for which Germany was liable definite in time and amount, and established the Bank for International Settlements as a receiving and distributing agency. The Lausanne Settlement reduced the claim against Germany to such a low figure that reparations can no longer be considered a major problem. This settlement will probably force a revision of the war debt agreements.

The building of empires has been actuated mainly by the desire for economic gain thru the control of colonial trade—a policy of economic imperialism. Often it develops gradually by the economic penetration of backward nations by investors and business men from stronger countries, who later demand protection for their investments from their governments. The policy of imperialism has not proved profitable, for only a small amount of trade can be controlled in this way, while its maintenance is costly, and it leads to international discord and warfare. It should therefore be abandoned in favor of a program of international organization, thru such a body as the League of Nations. Business men should be made to understand that when they make investments abroad, they assume the risks thereof.

SUGGESTIONS FOR FURTHER READING

An excellent statement of the relation between international trade and foreign investments, from the point of view of both theory and practical experience, is that of Theodore H. Boggs, *The International Trade Balance in Theory and Practice* (1922). A short but very satisfactory discussion of the same question is that of Frank W. Taussig, *Principles of Economics* (3d ed., 1921), Vol. I, Chap. XXXIII. C. E. Griffin, *Principles of Foreign Trade* (1924), Chaps. XV and XVI, is also well worth reading. For a succinct analysis of recent theoretical criticisms of the classical theory of international trade balance adjustments see Herbert Feis's article, *The Mechanism of Adjustment of International Trade Balances, The American Economic Review,* December, 1926, pp. 593–609. See also the excellent inductive study of H. D. White, *The French International Accounts 1880–1913* (1933).

A convincing argument in justification of central bank policies that strive to prevent the working-out of the mechanism of trade adjustment to capital movements is that of Lauchlin Currie, *Domestic Stability and International Capital Movements,* published in the volume *Explorations in Economics* (1936), pp. 46–56. One of the best treatments of capital movements is Carl Iversen's *Aspects of the Theory of International Capital Movements* (1935). See also Jacob Viner, *Studies in the Theory of International Trade* (1937).

H. G. Moulton's and Leo Pasvolsky's *War Debts and World Prosperity* (1933) is an exhaustive, scholarly treatment and has been used freely in the revision of the discussion of these problems. Acknowledgment is hereby gratefully made. A shorter, but equally useful analysis of the events up to 1931, is Alvin H. Hansen's *Economic Stabilization in an Unbalanced World* (1932), Part I. For a very brief study containing an excellent analysis of the arguments for and against cancellation see C. R. Whittlesey, *Reparations, War Debts, and Foreign Investments,* an essay published in *Facing the Facts* (1932), as Chap. IV. Sir Arthur

Salter's *Recovery: The Second Effort* (1932) is an interesting authoritative discussion of broader international economic problems.

Herbert F. Fraser, in his *Foreign Trade and World Politics* (1926), gives an admirable analysis of the questions of economic imperialism. Liberal use has been made of this work in the writing of Part B of this chapter. A very stimulating book on the same subject (used also by Professor Fraser in his work) is that of Leonard Woolf, *Economic Imperialism* (1920). Parker T. Moon, in his *Imperialism and World Politics* (1926), also gives a splendid analysis of imperialism. Moritz J. Bonn's article *Imperialism,* published in the *Encyclopedia of the Social Sciences* (1932), Vol. 7, pp. 605–613, is worth reading. Lionel Robbins has written a very penetrating analysis of the relation of the modern trend towards centralized economic control and international relations in his *Economic Planning and International Order* (1937). For current information, the publications of the Foreign Policy Association furnish an excellent, readable source.

CHAPTER XIX

THE PLIGHT OF AGRICULTURE—AN ILLUSTRATIVE CASE

A. Agricultural Maladjustment

Why This Chapter Is Included.—In a measure, this chapter departs from the general plan of this book. It has not been our method to discuss the problems of particular industries, but rather to take certain broad economic principles and institutions, such as those dealing with integration, the price system, money and credit, and to show how the problems arising from them cut across many industries and affect our economic system generally. Agriculture has been singled out for separate treatment for two reasons.

In the first place, it is an industry of outstanding importance which has been in a condition of distress for several decades. Tho our agricultural population is declining, the number of people gainfully employed in it exceeds that of any other single branch of production. About 32,000,000 persons live on our farms and depend on the produce of agriculture for their livelihood. The welfare of so large a group cannot fail to influence greatly the economic well-being of the entire nation.

In the second place, it would be hard to find a better example of how the various essentials to economic progress which we have been discussing come to a focus in a given industrial situation. This is especially true of the subjects considered in Part III, which this chapter brings to a conclusion. The farm problem involves questions of marketing; it has been the source of much of the agitation for regulation of the price system; it is closely tied up with the subjects of monetary stabilization, bank regulation, and business cycles; and it is vitally affected by the movements of international trade and by tariff policies.

The Distress of Our Farmers.—The agricultural population of the United States has long been in a less prosperous state than most of our other industries, and in the past few years this condition has become increasingly aggravated. The Great Depression of 1933–1937 was the last straw, resulting in the complete prostration of many of our farming areas. It is difficult to make a fair comparison between the prosperity of farmers and that of other business men because most of the former do not keep reliable accounts of their business income and outgo and because much of what they receive

comes to them, not in the form of money received from the sale of their products, but in food raised in their own gardens, fuel cut from their own timber lands, and lodging provided by their own houses. However, there is evidence enough that they have been faring badly.

To begin with, farmers as a class are receiving an unduly small share of the total income of the nation. This is shown in the following table:[1]

Year	*% of Total Income Going to Agriculture*	*% of Persons Gainfully Employed in Agriculture*
1889	12.8	39.0
1899	14.1	36.0
1909	16.2	25.49
1919	19.0	22.21
1924	11.0	20.11
1928	10.0	18.00
1930	7.5	18.0
1932	5.6	21.3

If the agricultural class was receiving a share of income proportionate to that of the other industrial groups in our population, the percentage of total income going to the former would be equal to the proportion of those employed in agriculture. The table shows, however, that for the last forty years it has been consistently lower. Only in the post-war period, of which the year 1919 is a fair example, did it approach equality. In the beginning of the period covered by this study, farmers were getting less than one-third of the share of income which would have placed them on a par with other industries, and by 1930 it was less than half.

Another indication of the situation is afforded by a comparison of the prices of farm products with those of non-agricultural commodities. According to the following table farm prices were falling more rapidly than the prices of other commodities prior to the new farm policies begun in 1933.

RATIO OF PRICES RECEIVED BY FARMERS TO PRICES PAID BY THEM[2]

Base 1909–1914 = 100

1910	106	1919	102	1928	90
1911	93	1920	99	1929	89
1912	99	1921	75	1930	80
1913	99	1922	81	1931	62
1914	101	1923	88	1932	60
1915	95	1924	87	1933	64
1916	95	1925	92	1934	73
1917	118	1926	87	1935	86
1918	112	1927	85	1936	92

[1] Figures for 1889 to 1928 from W. I. King, *The National Income and Its Purchasing Power* (1930), p. 53; those for later years from S. Kuznets, *National Income and Capital Formation, 1919–1935* (1937), p. 17, and U. S. Dept. of Labor, *Handbook of Labor Statistics, 1936*.

[2] United States Dept. of Agriculture, *Agricultural Statistics, 1937*.

If the prices of agricultural commodities retained their parity with other goods, the index thruout the period would stand at 100. Whenever it falls below that figure it indicates that farm prices have fallen in relation to the prices of other commodities, and hence, that the farmer is receiving less for what he sells in proportion to what he must pay for the things he buys. It is to be observed from the table that, while the farmer enjoyed a period of increasing prosperity in this respect during the World War and immediately after, his prices were more disastrously affected by the depression in 1921 and in 1930–31 than those of other industries.

That falling agricultural prices have not been accompanied by corresponding decreases in costs of production is shown by an interesting study of Dr. Mordecai Ezekiel, of the United States Department of Agriculture,

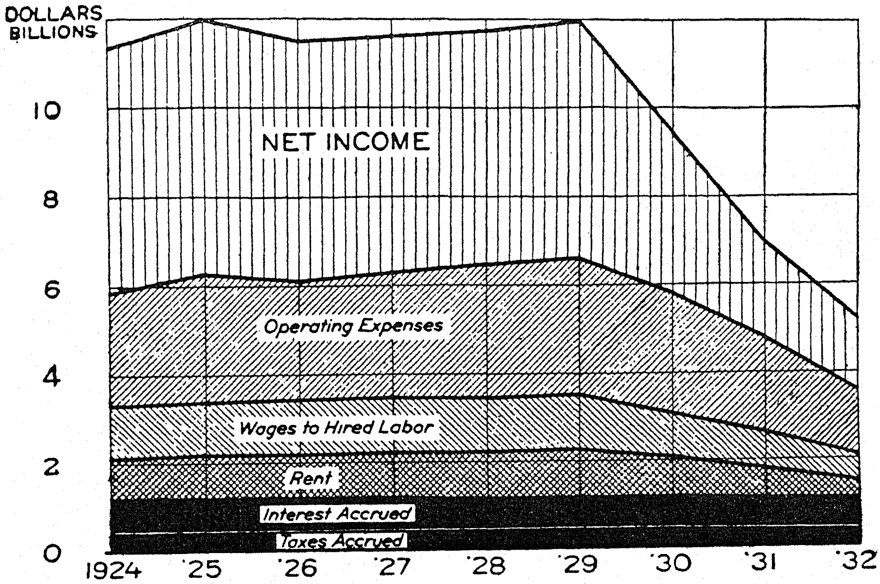

FIGURE 9. Gross Farm Income and Expenditures.

which is shown graphically in the accompanying drawing.[3] This shows that gross farm incomes fell from about $12,000,000,000 in 1929 to a little more than $5,000,000,000 in 1932. Expenses, however, did not decline proportionately. They decreased from about $6,500,000,000 to slightly less than $4,000,000,000. The result was that the net income of the farmers dropped about two-thirds, *i.e.,* from $5,000,000,000 in 1928 to $1,500,000,000 in 1932. Such was the effect of the general industrial depression upon agriculture.

[3] Mordecai Ezekiel, *Agriculture: Illustrating Limitations of Free Enterprise as a Remedy for Present Unemployment, Journal of the American Statistical Association,* March 1933 Supplement, p. 183.

Income statistics obtained prior to this depression indicate that even then the average per capita income of our farm residents was less than half that for the entire population. As an illustration, we may take the year 1929, which immediately preceded the crisis. Tentative estimates of the total income realized in agriculture during this year place it at $8,254,000,000.[4] The farm population was then about 30,500,000. This gives a per capita income for those living on farms of only $271, as compared with an average for the American people of $752 (as shown in Chapter II). While some members of farm families undoubtedly are employed in other occupations than agriculture, it is evident that the supplementary revenues derived from such sources would not make the farm average comparable to that elsewhere. Neither would possible errors in allowances for the rental value of houses occupied by farm owners, or food and fuel consumed on the farm. Altho a few farmers make very good profits, it is evident that farm earnings, for the most part, are exceedingly low. As a consequence, for many years there has been going on a steady exodus of young men from our farms, seeking more profitable opportunities in the cities.

The Nature of Agricultural Industry.—The reasons for the distress of our farmers lie partly in the nature of agriculture itself, as it is now carried on in this country, and partly in conditions which are external to the industry. Farming is a business with a great diversity of products, such as cattle, hogs, sheep, poultry, milk, butter, cereals, cotton, garden vegetables, fruits, tobacco, wool, and others of less importance. Altho there is some regional specialization, not infrequently one farmer produces a number of these commodities. Since most of the products are used for food purposes, they are to some degree interchangeable and mutually competitive. Hence a surplus of any one crop is likely to depress the prices of others also. This makes it difficult for those who carry on diversified farming to make up losses caused by low prices in one direction by gains from high prices in another.

To a much greater extent than other industries, farming is subject to the vicissitudes of weather changes. In one year there will be bumper crops caused by favorable conditions; in others, short crops caused by droughts, storms, floods, insect pests, and other disasters. In those agricultural districts, such as the cotton and wheat belts, which depend mainly on one crop for their principal source of income, these inevitable fluctuations react with great force upon the prosperity of whole areas.

Where such conditions prevail, unusually careful methods and skilled management are needed to cope with them adequately. For the most part, however, our farms are of small size, so that the income to be gotten from

[4] These are preliminary figures of the National Bureau of Economic Research, subject to later correction. The farm population is based on Census Reports for the years 1920 and 1930. See *Statistical Abstract of the United States* for 1932, p. 571.

their exploitation is inadequate to attract that kind of management which has been so successful in many of our manufacturing and commercial enterprizes. The result is that the farms are managed for the most part by no more than average people, who are often without sufficient ability or training to meet the problems that confront them. In many cases, it has been the most enterprizing members of the farmer's family who have left their homes to seek the greater opportunities of the city, leaving the rest behind to get along as well as their abilities and lesser opportunities permitted.

The Growth of Our Cultivated Land Area.—Coupled with these factors within the farm itself, there have been going on certain social processes which have aggravated the situation. In spite of the difficulties which agriculture has faced, its production has been increasing with great rapidity. The output of agricultural products in 1925 was more than double that of 1880, while per capita production increased 61 per cent in the same period.[5] Part of this increase can be attributed to the expansion of the land area devoted to farming. This just about doubled during the period just referred to.[6] Early in the nineteenth century the federal government acquired an enormous public domain resulting from such events as the Louisiana Purchase, the Mexican War, and gifts from the various states. With a view to developing this land as rapidly as possible, much of it was given away to settlers under the Homestead Act, and millions of acres were sold at prices as low as from one to two dollars an acre. As this was virgin land practically untouched by the farmer, its abundant supplies of timber and its rich fertility made it attractive to settlers. Hence, in a few decades most of it had been occupied and subjected to cultivation. A great deal of this land, however, was not suited in the long run to crop farming. There is a margin of cultivation, determined by the size of a country's population, and its demand for agricultural products in relation to the available land area, beyond which it does not pay to cultivate. Much of the land put to the plow during this period of expansion was of sub-marginal character—stony, arid, or in other ways disadvantageous for ordinary farm operations. It should, therefore, have been put to other uses, or left unoccupied. When its forests were gutted or its original fertility exhausted, its owners found themselves with an investment in houses, barns, and other improvements which they could not readily dispose of, but which they could no longer use profitably. Tho there has been abandonment of farms in some districts, such as the mountains of New England, much of this sub-marginal land has continued to be cultivated. To it is to be attributed part of the low earnings received by the participants in agriculture.

During the World War and the years immediately following, our

[5] A. M. McIsaac, *Whither Agriculture?* in *Facing the Facts* (J. G. Smith, ed., 1932).
[6] *Ibid.*

farmers experienced a period of temporary prosperity. The devastation of agricultural districts in Europe, caused by their being turned into battlefields, coupled with the drafting of men for war service, made the countries across the Atlantic turn to us for supplies of foodstuffs and raw materials which they had formerly obtained from other areas. This increase in demand for American products caused much more of our land to be devoted to staple crops, such as wheat and cotton, which were sold at relatively high prices. When this abnormal demand subsided farmers were reluctant to abandon this acreage or convert it to other uses. Hence an excess production of these commodities continued.

Technological Improvements in Agriculture.—While this growth in the land area devoted to crop farming was taking place, there were also going on changes in agricultural methods comparable to the Industrial Revolution in manufacturing which was briefly described in the second chapter. There have been many scientific improvements in methods of farming during the past generation. New seeds, more potent fertilizers, methods for combating insect pests, and similar improvements have been developed. Federal and state governments have been conducting scientific research and experiments to promote such innovations, and farmers have been educated to employ them thru the dissemination of numerous free bulletins and the activities of local farm agents. Coupled with this, many kinds of machinery have been invented which have increased the output per man in farming. The McCormick reaper and binder, with which all students of American history are familiar, was but the forerunner of many devices which were to follow. We now have all sorts of farm machinery which was undreamed of by our grandparents. There are loaders, planters, manure spreaders, mowers, and a host of similar devices. Then there is the complicated harvester and thresher combine, the sale of which has increased from 1,500 to 17,000 in the short period from 1924 to 1930.[7] Equally important is the growing use of the commercial truck and the tractor. The truck increases the capacity of the farmer to get his produce to the market, while the tractor speeds up many of the operations of farming. In 1930 no less than 920,000 tractors were being utilized on American farms, an increase from 2,000 in 1909.[8] Not only has such machinery released labor for other employment, but the substitution of the tractor for the horse has released for crop farming acreage formerly used for grazing and growing horse food.

Finally, we now have many agricultural schools and colleges which are training young men to adopt these new methods of agriculture. As these men go into farming enterprizes they find that the differential advantage gained by their superior training enables them to make a fair living in spite

[7] United States Dept. of Agriculture, *Yearbook* (1932), p. 422.
[8] *Ibid.*

of the obstacles to be surmounted, but their competition with the older farmers makes conditions all the more difficult for the latter. As farming comes more and more into the control of educated specialists they will lose their differential advantage, and will be faced with much the same conditions that have contributed to the agricultural distress which has been described, unless measures are taken to correct the other causes of maladjustment.

Demand Has Not Kept Pace with Increased Production.—If demand had kept pace with the increased production resulting from the changes described in the foregoing paragraphs, the farmers would not have been placed in such serious difficulties; but it has not increased in proportion to the increase in production. For one thing, the demand for food products is rather inelastic. That is, a fall in price does not result in a very great increase in consumption. People need only a certain amount of food, and will not eat much more of it even tho it becomes cheaper. When food products decline in price, consumers are much more likely to use less of the staple farm crops and to indulge in more luxurious types of food, such as garden truck and exotic fruits which are less widely produced. This affects adversely the staple crop areas. An example of this is shown by the fact that between 1880 and 1926 the per capita consumption of flour in this country fell off 24 per cent,[9] while the sale of oranges rose from 6,000,000 bushels in 1899 to more than 50,000,000 in 1931. Grapefruit consumption increased from 31,000 bushels to more than 15,000,000 in the same period.[10] Naturally, the producers of the last two commodities have not experienced as severe a depression as the growers of staple products. The inelasticity of demand for staple food products can be illustrated by another example. In 1925 we had a small crop of potatoes, amounting to only 322,000,000 bushels, which were sold for $1.80 per bushel. The total receipts from this crop were $579,600,000. In 1928 there was a bumper crop of 462,000,000 bushels, but the price fell to 61 cents, so that the total receipts were only $281,820,000. In other words, the larger crop yielded less than one-half the income of the smaller one.[11] Similar illustrations have frequently been quoted for other commodities. This inelasticity is less true of raw materials than foodstuffs, but since a large part of our agricultural regions are producing the latter, it can be seen that the fluctuations between good and bad years have very demoralizing effects upon farm incomes.

In the long run this factor would not be an insuperable obstacle to agricultural prosperity if the average demand, year in and year out, grew commensurately with the average increase in production, for the losses sustained in years of low prices would be offset by the profits obtained when

[9] National Industrial Conference Board, *The Agricultural Problem in the United States* (1926), p. 82.

[10] United States Dept. of Agriculture, *Yearbook* (1932), p. 706.

[11] United States Dept. of Agriculture, *Yearbook* (1930), pp. 589–590.

high prices were prevailing. The main trouble lies in the fact that the long trend of agricultural demand is not keeping up with the long run increase in production. Our rate of population growth is just about equal to the rate of increase in the physical output of agriculture; but we have a surplus of agricultural products above domestic needs, for the sale of which we have depended upon foreign markets. Up until the close of the nineteenth century we had been able to dispose of this surplus, because our land was plentiful in relation to labor and capital, while in Europe the reverse condition prevailed. An international balance was reached by which we exported foodstuffs to Europe in return for manufactured goods. Thus we were large exporters of wheat, cotton, and other staple products. Within the last three decades, however, our exports of these commodities had begun to decline, due partly to the growth of agricultural production in new areas such as Australia, Argentina, and Russia, and partly to foreign tariffs levied against our goods in order to encourage home production. It has already been shown that the World War gave a temporary set-back to this tendency, and forced Europe to come to us once more for a large proportion of its foodstuffs and raw materials. Since the war we have again felt the competition of foreign producing areas and the impediment of protective tariffs, so that it is increasingly difficult for us to dispose of our agricultural surplus. American prohibition, by depriving the farmers of a large market for hops, barley, and rye, has contributed to the declining demand. Some Americans are hopefully thinking that the post-war decrease of European demand for American agricultural exports is due to Europe's inability to buy because of the disturbed financial conditions resulting from the debts and reparations problem. They believe that this situation will eventually be remedied, and that our farmer can look forward to a profitable export market once more. In view of the fact that the competition of the new producing areas just referred to was beginning to be felt before the World War, and that our exports had begun to decrease early in the present century, this hope appears to be illusory. We see, then, that the American agricultural problem is closely connected with the questions of international economic relations that were discussed in the two preceding chapters. It also involves the problem of balancing demand and supply, thru prices, which was the theme of Chapter XII.

Farm Tenancy, Indebtedness, and Taxation.—In the early days of American agriculture most of our farms were operated by their owners, who had acquired them thru settlement, inheritance, or purchase at reasonable prices. As the land came to be occupied, however, land values increased, making the purchase of a farm more expensive. The mechanical equipment necessary to operate a farm by modern methods, moreover, requires the investment of a considerable amount of capital. Here we are faced with the problems of investment and finance which we discussed in connection with

our banking system. The high investment now required to operate a farm makes it difficult for a young man to get established in the industry. Consequently there has been a growing amount of tenant farming, where the operator rents his farm, paying a stipulated amount to a landlord who is in reality a capitalist. It is generally believed that this makes for depreciation of the capital represented by farm land and investments, for the reason that a tenant has less interest in keeping up soil fertility and making repairs to farm improvements when he does not own them.

It is the ambition of most tenants to own their farms eventually. If they can save up a small surplus they can do this, by purchasing the farm, subject to a mortgage. This burdens the tenant with a heavy debt which it would take years to pay off, even if his farming operations were reasonably successful. Since the farmer seldom has much savings to invest, he must also borrow to acquire the expensive machinery needed to cultivate his ground efficiently, and sometimes he needs loans to secure his seed and fertilizer. These problems would not differ so greatly from those which are faced by the ordinary business man, if agricultural prices were high enough to pay a reasonable return on the investment and provide for the gradual amortization of the debt. We have seen, however, that this condition is not realized, that much of our land which is cultivated is not of a character to pay adequate returns for the investment necessary to operate it. In the post-war period the farmer was also faced with the difficulty that confronts all debtors when prices are falling. In Chapter XV it was shown that falling prices are disastrous to debtors because their debts are contracted in terms of an inflexible number of dollars, while the dollar returns from sales of their merchandize are decreasing. Not only did farm prices drop more rapidly than those of other commodities, but, prior thereto, farm indebtedness had been greatly increased. During the World War boom, when agriculture was relatively prosperous, farm values rose considerably. Many mortgages were contracted during this period on the basis of these inflated land values. In fact, the farm mortgage debt, which in 1910 was only about three and one-third billion dollars, had more than doubled itself in 1920, and by 1925 had reached nine and one-third billions. The farmer was thus faced by higher interest charges on the one hand, and falling income on the other. He was therefore unable to meet the interest on the inflated mortgages, not to mention the burden of his other debts.

These financial difficulties have been further complicated by the taxes placed upon farmers. Taxes have not decreased with the fall in prices, but they have actually risen. The National Industrial Conference Board estimates that taxes paid by agricultural products rose 236 per cent from the average of 1909–1914 to the period of 1924–1925.[12] During this time the gross money incomes of the farmers increased only 100 per cent.

[12] *Op. cit.*

The result of these conditions has been the financial ruination of many of our agricultural regions. Farmers have been forced into bankruptcy, and thousands of them have lost the ownership of their farms thru foreclosures or tax delinquencies. Altho they remain on the farms as tenants in most cases, they have lost whatever savings they may previously have invested in what was formerly their property. This financial collapse affects not only the farmers. It has led to many bank failures in agricultural regions, and it has caused some embarrassment to insurance companies and other financial institutions whose funds were invested in farm mortgages. Moreover, it affects business conditions generally, because when the purchasing power of agricultural districts is impaired a large market for the sale of manufactured merchandize is injured. Thus the farm problem is intimately involved in those general conditions of business prosperity and depression which were analyzed in Chapter XIV.

B. Proposed Measures for Improving the Agricultural Situation

Conflicting Viewpoints on the Problem.—Like most other economic questions, the problem of agricultural maladjustment is too complicated for easy solution. It requires the carefully trained study of economists who have specialized upon this subject. Unfortunately, most of the remedies which have received favorable consideration have emanated from farm representatives who do not have this background. Of course, we cannot expect the average farmer to be versed in the economics of the situation, nor to understand the combination of causes which have led to his difficulties. It is not to be wondered at, therefore, that his plight has caused him to vent his wrath on various groups whom, from time to time, he believes to be responsible. The wolves of Wall Street, the various middlemen and speculators, the produce exchanges, federal monetary policy and other factors have been attacked as the causes for his downfall. Many of the legislators who have brought forth proposals designed to bring back agricultural prosperity have shown no more insight than the mass of their constituents. Hence there has been a flood of suggestions, including inflation, tax reduction, coöperative marketing, tariff protection, federal subsidies, price fixing, and crop curtailment. Some of these measures must now be considered.

Inflation as It Would Affect the Farmer.—The agricultural regions have long been the principal source of "cheap money" agitation in this country. In Bryan's famous free silver campaign of 1896 which, if successful, would have flooded the country with an over-valued silver currency, it was the rural districts of the Middle West and South which gave him most of his backing. The voice of the farmer was again felt in support of inflation during the depression of 1930–1933. It was as a result

of this pressure that emergency powers to inflate the currency were then given to President Roosevelt. After inflationary power was granted by Congress strong influence was brought to bear upon him from agricultural districts to exercize it.

We have here a good illustration of the principles explained in Chapter XV. In that chapter it was set forth that inflation enables debtors to pay off their debts more easily because money has depreciated in value. We have seen that the farmers are burdened by heavy indebtedness, especially in the form of mortgages. If prices could be forced upward by money inflation, the prices of their products would rise while their debts would remain the same in terms of dollars, and they could be relieved of their burden at the expense of their creditors. In other respects inflation would not be of much assistance to the farmers. The latter know that they are getting low prices for their produce, and it is natural that they should seek some means of forcing these prices upward. They do not fully realize, however, that price increases brought about by expansion of the currency will raise the prices of the things they buy as well as of the things they sell. Out of this relationship no increase in real income would accrue to them. The reverse would be more likely to happen, for it seems probable that the prices of manufactured goods would go up faster than those of farm products. Our previous discussion led to the conclusion that in a period of falling prices, if liquidation has not been completed, a *moderate* degree of inflation might be helpful and would correct some of the injury to the debtor classes, but the effects of *extensive* inflation are so disastrous on the community generally that such a policy is very inadvisable. There is nothing in the farm situation to warrant a contrary conclusion.

Protective Tariffs on Agricultural Commodities.—The agricultural problem raises the questions of free trade and protection which were discussed in Chapter XVII. We there learned that most of the arguments usually advanced in favor of protection are fallacious. Up until recent years import duties in this country were levied chiefly on manufactured goods in order to encourage our urban industries. These worked to the disadvantage of the farmer because they raised the prices of the things he bought, while they injured the foreign market for his surplus products because, as we have learned, when imports are restricted foreigners have greater difficulty in obtaining the means of purchasing American exports. Hence, our agricultural regions, and the South in particular, were opposed to the Republican protectionist policy.

Within the past decade and a half, however, representatives of the farmers have turned to protection as a means of helping the latter out of their difficulties. In the Emergency Tariff of 1921 some duties were levied on agricultural imports, and these were extended by the Fordney-McCumber Bill of 1922 and the Smoot-Hawley Tariff of 1930. The result of these

measures is that we now have "protective" tariffs on most agricultural products. Under existing conditions these tariffs can be of little benefit to the farmers. There are a few agricultural commodities, such as sugar and long-staple cotton, which cannot be produced to advantage in sufficient quantities in this country and which are, therefore, imported from foreign sources. In these cases the tariff gives some aid to the farmers (at the expense of consumers) by making for higher prices. The analysis of Part A of this chapter, however, shows that we have a surplus of most of our staple crops, for the disposal of which we depend on a foreign demand. Having already too much of them at home, we do not import them in sufficient quantities for tariff protection to be of any value. On the other hand, every increase in protective duties makes the sale of this exportable surplus more difficult, for reasons which are now familiar. In general, then, it is fair to say that protection, taken by itself, contributes little, if anything, to the solution of the farm problem.

Under one condition, however, an exception would have to be made to this statement. If, by other means, we could keep domestic prices on farm products above their world level, import duties could assist in maintaining such prices by preventing imports at lower prices from foreign producing areas. Such a combination of tariff protection with artificial measures to raise home prices has been attempted in recent years. Let us consider the steps which led up to this legislation.

The Equalization Fee and Export Debenture Proposals.—It has been shown that in the depressions of recent years farm prices fell faster than those of other commodities. In attempting to correct this situation legislation was pressed upon Congress intended to raise the prices of grain and livestock. Twice such measures were passed, and were only defeated by presidential vetoes. One such bill proposed that the government should establish an export corporation which would purchase all the grain offered to it at prices which would maintain agricultural products on a par with the movement of the prices of other commodities, as shown by index numbers. It was expected that the effect would be to raise domestic prices thruout the country to the figures so established, for farmers would not offer their product to domestic buyers at prices lower than they could obtain from the export corporation. The corporation was to sell abroad, at whatever prices could be gotten for it, all the produce which it could not market at the established price in this country. The loss on such foreign sales was to be recovered by a so-called "equalization fee," collected from the growers from whom the corporation had made its purchases. It was expected that the receipts from these fees would be sufficient to offset the loss from foreign sales, and still give the farmers a reasonable profit because of the high prices maintained in the domestic market. Another plan called for the paying of a bounty on certain farm products exported to foreign markets. This bounty was to take the form of "debentures" which would be accepted

by the United States government in payment for import duties. The purpose of this last provision was to create a market for the debentures so that they would have a sale value to exporters. It was expected that the prices of domestic farm products would be raised by the amount of the bounty. It is to be noted that, while consumers were paying artificially raised prices, the government would be losing the amount of the bounty because it would be accepting export debentures in lieu of import duties. It has been estimated that the cost to the public from this plan would have averaged $518,000,000 per year.[13] Both the equalization fee and the export debenture proposals were to be accompanied by sufficient tariffs on the commodities protected to prevent the high domestic prices established from being lowered by a back-flow of imports from abroad.

These measures again illustrate the truth which has previously been elaborated, that we cannot destroy the natural equilibrium of supply and demand by merely tinkering with prices without getting into difficulties. In neither of these plans was there any provision to reduce the overproduction in agriculture which we have found to be the chief cause of low agricultural prices. If they had succeeded in keeping farm prices at profitable levels, farmers would have been encouraged to produce more than ever, the overproduction would have been increased, and the disposal of the surplus abroad would have become a problem of increasing difficulty. The losses on foreign sales from such increase in surpluses would soon have exceeded the gains to be derived from higher domestic prices. The government would either have had to finance these losses at tremendous expense to tax-payers, or the plans would have had to be abandoned. In both cases the net result would have been the payment of a subsidy to the farmers, at the same time aggravating an already acute condition of overproduction.

Altho these proposals failed to become law, continued agitation for some legislation of the sort resulted in the establishment in 1929 of the Federal Farm Board, the creation of which was designed in part to attain similar objectives. Since the activities of this body involved a considerable development of farmers' coöperatives, we must discuss the nature of such associations before describing the work of the Farm Board.

Coöperative Marketing of Agricultural Products.—Once more we see how the principles of applied economics discussed earlier in our study have their bearings upon the agricultural problem. We learned in Chapter XI that marketing costs are growing in relation to those of primary production, such as agriculture and manufactures. We found this to be due to the ever-widening markets in which products are now disposed of, and to the need for more intermediaries and specialists to establish contacts between

[13] The estimate is that of the United States Dept. of Agriculture, as cited by J. D. Black in *The Annals of the American Academy of Political and Social Science,* March 1929, p. 381.

primary producers and consumers. The farmers, however, have not been convinced that our complicated machinery of marketing is necessary, and have long felt that too large a portion of the price paid by consumers for products made from agricultural materials is absorbed by the middlemen. Such facts as the following are the basis for their reasoning: a loaf of bread costing about eight and one-half cents in 1928 contained but two cents' worth of wheat; in 1932 a five cent loaf contained less than one cent's worth. Between 1928 and 1931 the price received for cigaret tobacco fell to one-half of its former level, while there was an actual increase in the selling price of the finished cigarets. The thinking of the farmer is based on the theory that the prices he receives are depressed by the costs of marketing, and that if the latter could be more efficiently handled it would result in higher prices at the farm. Our discussion indicates that the real cause of low farm prices is to be found, not in the marketing process, but in the fact of overproduction. Nevertheless, it has been demonstrated that farmers can gain some advantages by organizing coöperative associations to do their own marketing, instead of leaving this to independent middlemen.

The nature of coöperative marketing associations was briefly described in Chapter XI. They are simply wholesale merchandizing agencies, owned and operated by the farmers who make up their membership. The profits derived from their operations, instead of going to separate marketing specialists, are divided among the members. In 1925, 8,316 such coöperative associations were reported as active to the United States Department of Agriculture. Altho there have been many failures in such associations due to bad management, many have been very successful, providing facilities for standardizing, grading, and better packing of goods, branding and advertizing them, and providing warehouses so that products could be released for shipment in the most profitable periods. They have also been helpful in educating their members as to the best methods of growing their product, and in other ways. All these activities tend to secure for the farmer the best prices which are available, but they do not correct the problem of overproduction, except in those few cases where they have extended to the point where they almost amount to monopolies. The California Fruit Growers Exchange, for instance, controls 75 per cent of all the citrus fruits grown in that state, and 90 per cent of all the lemons, while the California Walnut Growers control 85 per cent of the walnut crop in that region. These organizations could, if they desired, bring about a curtailment of production which would result in monopoly prices for their products, tho they do not appear to have done so.

The Federal Farm Board and Its Work.—The success of farmers' coöperatives, coupled with pressure for the improvement of farm prices, finally led the federal government to embark on an ambitious project to propagate such associations. In 1929 Congress created a Federal Farm

Board, endowed with broad powers to provide a system of effective marketing for agricultural commodities and charged with the duty of protecting, controlling, and stabilizing the movements of agricultural commerce, preventing wasteful distribution, minimizing speculation, aiding in the prevention and control of surpluses, and preventing disastrous fluctuations and depressions in agricultural prices. To provide the machinery for its operations, it encouraged the setting up of numerous agricultural coöperatives and stabilizing corporations. Each of the latter was a sort of super-coöperative, owned and controlled by the lesser coöperatives in each agricultural industry. It was intended to stabilize prices by maintaining facilities for the storage of surplus crops when they threatened to cause price decreases, and by disposing of such surpluses, if necessary, in foreign markets. Congress provided the Board with a fund of $500,000,000 to loan to national coöperatives or stabilizing corporations. It was thought that this sum would be sufficient to enable the Board to exercize some control over prices, and that if losses were incurred on foreign sales the fund could be utilized to bear them.

The Farm Board was successful in promoting the development of local, state, regional, and national coöperatives for a number of our principal crops. Thru these it undertook extensive operations intended to stabilize the price of wheat in the way just outlined. At the time of its organization a large wheat surplus existed. By lending to the coöperatives, and later, by the organization of a Grain Stabilizing Corporation, it caused a large part of this surplus to be withheld, hoping thereby to raise wheat prices. Similar operations were undertaken on a smaller scale with cotton. The world production of wheat and the world-wide depression which began in 1930 frustrated this purpose. In spite of all it could do wheat dropped from $1.65 per bushel in 1929 to $1.50 in 1931, and cotton fell from $100 a bale to $30. Meanwhile the Board found itself with great stocks of wheat and cotton on its hands which it could not dispose of without great loss. Hence, in 1933 the Farm Board was abolished, and a new farm relief law was enacted. The Federal Farm Board experiment cannot be considered wholly a failure. It did good work in promoting the organization of farmers' coöperative associations which should prove of permanent value, but its price stabilizing activities were unsuccessful.

The Agricultural Adjustment Administration Program.—In another attempt to meet the problems of agricultural depression Congress passed a farm act in 1933 based on the "domestic allotment plan." It differed from all previous projects of farm relief in that it made a definite attempt to curtail the production of wheat, cotton, corn, hogs, rice, tobacco, and milk. The object of this curtailment was to restore the prices of these commodities to a "fair" figure, a "fair" price being defined as one which would have the same purchasing power as the average price of these commodities in the prewar period, August 1909-July 1914. To accomplish this purpose, the Secre-

tary of Agriculture was empowered to pay farmers a rent or "benefit" for voluntary withdrawal of acreage from production. The funds for these payments were to be secured from a "processing tax" levied upon the first domestic processor (middleman) who handled the commodity concerned, the gross amount of this tax to be equal to the difference between the prevailing market price and the "fair" price which it was desired to establish. This tax was to be refunded on all goods exported abroad. In the case of goods going into domestic use it was to be passed on to the consumer. To prevent profiteering by middlemen and retailers at the expense of the consumer, however, the Secretary of Agriculture was given power to make public the facts regarding such profiteering. He was also authorized to license producers and dealers in the commodities affected, with the idea that licenses would be denied to those who engaged in unfair practices or who endeavored to prevent the effective operation of the law. An Agricultural Adjustment Administration (the AAA) was set up to administer these provisions.[14]

A better understanding of the law can be obtained by an illustration of how it worked in the case of a given commodity. In the fall of 1933 Secretary Wallace endeavored to bring about a drastic reduction in the hog surplus. Five hundred million pounds of pork were to be disposed of by the slaughtering of brood sows and young pigs before January 1, 1934. Four times that amount was to be reduced the following year, partly thru reduction in the birth-rate of pigs consequent upon the death of the sows. The animals slaughtered were to be purchased at prices above the prevailing market rates. By agreement with the packers the pork was to be sold at low prices to relief agencies and to soap and fertilizer manufacturers, the packers being reimbursed for their loss by the Agricultural Administration. The latter was to recover its expenditures by a processing tax levied on all pork products. By somewhat similar measures benefit payments were made to wheat farmers to reduce their wheat plantings from eight to ten per cent below the 1933 acreage. Restrictive measures were also applied to such products as corn, cotton, and tobacco. This program was continued until January, 1936, when the Supreme Court declared the Agricultural Adjustment Act unconstitutional. The majority of the court held the Act to be an invasion of the rights of the states to regulate their local activities.

This plan is estimated to have raised agricultural incomes by approximately two billion dollars. However, since this increase came partly from taxes imposed by the government on the consuming public at large, the

[14] By the Bankhead bill, passed in 1934, a much more drastic means of curtailment was applied to the production of cotton. A prohibitive tax was levied on all of this crop ginned in excess of an established maximum. The amount permitted to be produced tax-free was allocated among several states according to their average production for the ten years previous, and the Secretary of Agriculture was to apportion this among the various growers *by setting a fixed quota for each individual farmer*. By an act of Congress in 1935 an even more rigid control was placed on the production of potatoes.

plan can hardly be defended as a permanent policy. It is not sound economy for consumers to be taxed in order to pay rent for land held in idleness. It is not fair to make the consumer pay the farmer to do what it is to his advantage to do. If the products of land do not bring sufficient return to pay for their cultivation, such land is worthless, and nothing should be paid for it. In the long run, agriculture must be put upon a self-supporting basis by slow and difficult measures of readjustment which will be discussed in the closing paragraphs of this chapter. However, as a temporary measure in a severe depression, the AAA program may possibly be justified. It may well be that if agricultural production were curtailed until the industry was on a par with other industries, restrictions could be removed and the production of goods by all industries increased at the same time. The operation of the plan presented some difficulties. Since everyone profited from the high prices resulting from crop reduction, whether he participated in the program or not, shrewd farmers were tempted to grow a full crop, depending upon others to do the curtailing. Even those who reduced their acreage could play a similar game by cultivating more intensively the land they did use. There was also some shifting of production to other basic crops which were not subject to restrictive measures, tending to depress their prices. We cannot know whether these difficulties would eventually have defeated the program.

In general it would appear that emphasis was placed upon the disbursing of a considerable sum of money to the largest possible number of farmers, rather than on real agricultural adjustment. And, with regard to the adjustment of agricultural to industrial prices, it must be pointed out that, if agricultural costs are falling, restoration to pre-war "parities" would not be wise. All that ought to be attempted is to keep agricultural prices high enough to cover the costs of production for representative producers. The forcing up of American agricultural prices also stimulated foreign production of certain commodities, particularly cotton. An expansion of foreign production, attributable in part to our restrictive measures, can scarcely fail to reduce permanently the volume of our agricultural exports.[15]

The "Ever Normal Granary" and the Farm Act of 1938.—Only a month after the AAA had been held unconstitutional, a Soil Conservation and Domestic Allotment Act was passed, again providing payments for crop curtailment to restore "parity" prices, but labelled as measures of soil conservation, and without the processing taxes which the Supreme Court had rejected. It was hoped that this bill would be upheld. However, it was soon superseded by the Farm Act of 1938, which reflects the "ever normal granary" philosophy, then popular with the Secretary of Agriculture. According to this philosophy, the purchasing power of farmers in relation to non-farmers should be restored to the pre-war relationship; but in pursuing this goal, coercive re-

[15] For a comprehensive appraisal of the AAA see E. G. Nourse, J. S. Davis, and J. D. Black, *Three Years of the Agricultural Adjustment Administration* (1937).

straint of production should be used only as a last resort. It is held, however, that in years of normal weather, farmers can produce more than the market can absorb at remunerative prices. At the same time too rigid restriction creates the danger of a domestic shortage in years when weather conditions are unfavorable. The "ever normal granary" seeks to avoid these two dangers—domestic shortage on the one hand, and a supply too large for remunerative disposal on the other, partly by crop reduction and partly by the storage of surplus crops in bumper years for release in lean years.

The new farm act continues the program of soil conservation and the making of parity payments. The latter are designed to compensate for the difference between the prevailing market price and the farmers' pre-war purchasing power. They are to be made only to those farmers who voluntarily coöperate in the program for soil conservation by withdrawing a certain portion of their acreage from cultivation, but there is to be no element of compulsion. When estimates indicate that the total supply of a given commodity will exceed a certain figure, marketing quotas are to be set. These quotas take effect, however, only when voted for by at least two-thirds of the producers in the particular field. Once the quotas become effective, fines are to be imposed for marketing in excess thereof. If, in spite of the quotas, prices drop below a certain percentage of the pre-war parity figure, commodity loans will be made by the government, and excess supplies stored until a shortage occurs to justify their release. Loans will not be made, however, if producers have rejected the marketing quotas in years when supplies were large enough to permit loans.

It is still too early to appraise this act with finality. In its favor it can be said that it involves less compulsion than the two preceding acts, while it decreases the danger of crop shortages and constitutes a more genuine attempt at real agricultural planning. On the other hand, it retains the mischievous idea that agricultural prices should be raised to their pre-war "parity," and its crop loan and storage programs threaten to repeat the mistakes of the discredited Farm Board project.

Facilities for Agricultural Credit.—It has often been objected that the banking facilities of this country do not provide adequately for the credit needs of agriculture. This is largely due to the fact that the farmer usually needs credit for a considerable period of time, whereas commercial banks are organized primarily to provide short-time credit. Frequently the farmer desires to offer a mortgage on his real estate as security for a loan. This kind of security is less liquid than the stock exchange collateral on which so many commercial bank loans are based; that is, if the loan is not met when due, the real estate cannot quickly be disposed of and converted into monetary assets. Again, the farmer often wants to finance his planting and other operations. This requires a loan of several months duration, because some months must elapse between the planting and ultimate disposal

of his crops. But the commercial banks are organized to do business on thirty, sixty, or, at the most, ninety day paper, which is not the kind the farmer is in a position to supply. The Federal Reserve Act in itself did not remedy these difficulties. Hence additional legislation and additional credit machinery has been provided to take care of the farmer.

In 1916 the national government attempted to meet these needs by establishing a number of financial institutions patterned somewhat after the Federal Reserve System. There was a Federal Farm Loan Board in Washington having supervision over a Federal Land Bank in each of the twelve Federal Reserve districts. These were authorized to extend loans on long-time mortgages to privately owned joint-stock land banks and coöperative national farm-loan associations. In 1923 the Agricultural Credits Act provided further facilities in the form of intermediate credit banks and national agricultural credit corporations. These institutions were authorized to sell debentures to the general public with five years maturity or less, the funds so derived to be employed in making loans to farmers for terms of from six months to three years for the purpose of marketing their crops and livestock.

In addition to these numerous agencies the Department of Agriculture had made emergency crop production loans in 1921 and afterward to tide the farmers over disasters caused by such occurrences as droughts and floods. Finally, there had been loans by the Regional Credit Corporation of the Reconstruction Finance Corporation, to meet the conditions caused by the depression beginning in 1930, and the assistance to farm coöperatives by the Federal Farm Board described in a preceding paragraph.

The multiplicity of these credit facilities led to the creation of the Farm Credit Administration in 1933 as a coördinating body to bring about some harmony in their policies and operations. In the same year a Farm Credit Act was passed providing for two new hierarchies of agricultural credit institutions, designed in part to continue and extend the promotion of agricultural coöperatives which had been begun by the Federal Farm Board. One of these consisted of twelve Production Credit Corporations holding stock in, and making loans to, local production credit associations, composed of farmers desiring to borrow money for ordinary farm operations. It was stipulated that such borrowers must also hold stock amounting to five per cent of their loans, and that as the loans were paid off, they would acquire the stock originally subscribed by the government. Thus the associations would in time become full-fledged farmers' coöperative banks. The second hierarchy consisted of a Central Bank for Coöperatives in Washington and Regional Banks for Coöperatives, whose purpose was to make loans to farmers' coöperative marketing associations. Both the Production Credit Corporations and the Regional Banks for Coöperatives are located in the same cities as the twelve Federal Land Banks, and the boards of directors

for all three institutions must in each case consist of the same persons, thus giving unity to the whole system. A large revolving fund was appropriated by the government to provide the capital for these central institutions, so that they might have ample financial resources to extend credit to the local credit associations and marketing coöperatives. This was designed to meet the emergency of temporary distress caused by the prevailing depression, as well as to provide permanent credit machinery for the future. The Farm Credit Administration immediately set about refinancing farmers threatened with foreclosure and other difficulties.

Altho this machinery appears to be more complicated than is necessary, it provides a diversity of specialized institutions which should be able to meet every legitimate credit need of our farmers, and it should be helpful in promoting the growth of coöperation in agriculture. While the provision of credit is important to farmers, just as it is to other business enterprizers, lending money will not solve the problems of that portion of the farm industry which shows no prospect of being able to pay its own way in the reasonably near future. We have seen that a considerable part of our agricultural industry is in this condition. Making more loans to farmers who are so situated will not pull them out of the mire; it will only get them deeper into it. Some radical readjustments in agriculture must be accomplished before the farm problem can find an adequate solution.

The Integration of Farm Management.—In Chapters IV and V attention was called to the progress being made in methods of management, and to the gains which can be derived from the integration of industry. At the beginning of the present chapter we learned that most of our farms are of small area and are, therefore, conducted by small-scale methods. Such farms do not provide enough gross income to warrant an investment in the expensive types of power and mechanical equipment now available for agricultural operations, nor do they afford opportunity for the other economies of large-scale production. Moreover, they do not attract the same high type of management which has been so successful in promoting some of our larger industrial corporations. If these farms could be combined into units large enough to permit adequate equipment and large-scale methods, costs of production would probably be less, and opportunities for profit would be correspondingly greater.

The technological improvements and new processes in agriculture described in Part A of this chapter are tending to bring about such an integration, and some large-scale farms are now in successful operation. It is not always necessary to the attainment of integration that a great number of farms lying adjacent to each other be consolidated into a single producing unit. Sometimes the same end can be attained by having a number of farms in the same locality operated by foremen in separate units, under the careful supervision of a capitalist owner-manager who directs their operations and

handles the buying and marketing. The integration of farming should be encouraged by the training of men equipped for farm management by our agricultural schools and colleges, and by credit arrangements which make it easy for capable farmers to enlarge their holdings. Altho such developments will make business more difficult for backward farmers who endeavor to continue by small-scale methods in competition with those who have superior managerial ability and greater capital, it is a necessary condition to agricultural improvement, and does not differ greatly from the same problem in other types of industry. The farmers displaced by such methods will be to some extent taken care of by being employed as foremen or supervisors in large-scale managements.

In Chapter XXIX we will learn that an interesting experiment with large-scale coöperative and state farming is now being carried on in Soviet Russia. The results of this experiment should be watched with interest by students of the American agricultural problem.

Restoring the Balance between Agriculture and Other Industries.—In the last analysis, the real way out from the plight of agriculture in this country must be by restoring the balance between agriculture and other industries. Thruout this chapter it has been emphasized that there is so much overproduction of agricultural products, in relation to the demand for them, that the returns to our farmers are not as great as those derived by participants in urban industries. The correction of this maladjustment requires the withdrawal of sub-marginal land from its present uses, and the transference of a part of our agricultural population to more gainful occupations. The workings of the price system will bring this about without governmental interference in time, thru the inability of the least successful farmers to earn a reasonable livelihood. The exodus from our farms which was earlier referred to, and the accompanying concentration of population in our cities which has been going on for many decades, is an evidence that this corrective tendency is working. But such a readjustment is attended with great distress for the farmers who are gradually being dispossessed of their properties and forced out of their occupation. Hence the violent protests and frantic efforts to find some legislative solution which have been outlined. A far-sighted agricultural policy would recognize the inevitability of this transference and would seek to accomplish it, not by quack projects for raising farm prices, but by permitting it to take place with a minimum of disturbance. This would require the coöperation of state and federal governments in a comprehensive program. Some of the steps necessary for such a policy may here be briefly outlined.

In the first place, we should reclaim no more land for crop purposes (*e.g.*, irrigating deserts or draining swamps) unless there is a good prospect that its cultivation will pay. Otherwise we only add to our already swollen production of agricultural products. In the second place, a systematic survey

of the land resources of our nation should be undertaken to determine for what uses they are best adapted. Those lands which are found to be suitable for profitable farm operations should be classified as to the type of product which offers the greatest opportunity for reasonable profits, whether it be staple crops, fruit growing, truck gardening, or animal breeding. Perhaps new crops, in the way of luxury goods which will lure the consumer's dollar from his pocket-book, may be discovered, just as the grapefruit industry has been a development of the last few decades. Land which is not adapted to farming can be set aside for forest reserves to replace our stocks of timber, which are rapidly being depleted, or they can be converted into public parks, and possibly other uses. It has been suggested that a special national commission should be created to make such a survey. Following this classification, efforts should be made to direct lands unprofitable for farming purposes to the best uses for which they are suited. This is the most difficult part of the program, but it would help towards its accomplishment if the state and federal governments would purchase submarginal lands for the purposes which have been mentioned. Some of this has already been done, of course, but more of it would be justified. Forest reserves and public parks are a good investment for public funds, and far better than the payment of subsidies to farmers, which only aggravate an already acute situation. Finally, we need a national employment service such as was outlined in Chapter IX. Such a service would assist in correcting the unbalanced condition of agriculture by helping farm owners and farm laborers who are not making a decent living to find better opportunities for employment elsewhere.

Our government has a long-range program to develop such regions as the Tennessee Valley so that other than purely agricultural pursuits will be possible there, to relieve conditions of drought and poor fertility by planting trees, making cheap fertilizer, etc., and to shift people from sub-marginal land to regions where they can earn a decent livelihood. These projects have merit, but it will take at least a generation to accomplish them.

Summary

The problems of agriculture illustrate many of the principles discussed in preceding chapters of this volume. That American farmers are in a serious plight is indicated by their relatively small share of the national income, the declining profits of agricultural industry, and the decreasing ratio of prices received for farm products to those which are paid for manufactured goods. The causes of this lie partly in the vicissitudes of the farming industry, the small-scale of farming operations, and the lack of capable management; but they are even more due to the tremendous increase in agricultural production resulting from the growth of our cultivated land area and the technological improvements which have taken place in the industry. Demand has not kept pace with this increasing production, because the de-

mand for agricultural products is rather inelastic, and the foreign demand has been falling off because of the competition of other crop-producing areas. The increased investment necessary to purchase and equip a modern farm has led to a growth of farm tenancy. Heavy mortgages, based on inflated land values, and falling agricultural prices preventing the payment of interest on these mortgages—not to mention the increasing burden of taxes—have resulted in the loss of their properties by many farm owners thru bankruptcies and foreclosures.

Many solutions have been proposed to meet these difficulties. Currency inflation would reduce the farm debt, but would cause so many difficulties in other ways that it is not advisable. Protective tariffs on agricultural products are of little value because, for the most part, we export and do not import such commodities. The equalization fee and export debenture plans proposed to raise domestic prices and dump the unsold surplus abroad at a loss. Since they would have increased rather than decreased production, these proposals could hardly have succeeded. Coöperative marketing of farm products has some benefits, but does not correct the fundamental evil of overproduction. The Federal Farm Board was established to promote such coöperatives, and to stabilize and raise agricultural prices by disposing of crop surpluses, but its operations were unsuccessful. There followed the Agricultural Adjustment Administration, which paid the farmers rents for lands held in idleness or benefits for curtailing their output of certain agricultural commodities. Such benefits were recovered by a processing tax passed on to consumers. The income of the farmer increased somewhat while this plan was in operation. In 1936 the Supreme Court declared the act which set up the AAA program unconstitutional. The latest farm legislation represents a combination of payments for acreage restriction, purportedly to further soil conservation, marketing quotas, and commodity loans, designed to promote an "ever-normal granary." Besides these measures, agriculture has been helped by three special groups of banking institutions centering in the Farm Credit Administration and patterned somewhat after the Federal Reserve System.

In the long run, the most helpful measures for agricultural improvement call for the integration of farm management and restoration of the balance between agriculture and other industries thru conversion of sub-marginal lands to other uses, and the transfer of our surplus agricultural population to other employments.

SUGGESTIONS FOR FURTHER READING

Two brief surveys of our agricultural problem which have furnished some suggestions for the foregoing discussion are contained in A. M. McIsaac's cleverly written essay entitled *Whither Agriculture?* in *Facing the Facts* (J. G. Smith, ed., 1932) and two chapters on *The American Agricultural Problem,* by C. Louis Knight in P. F. Gemmill and Associates' *Contemporary Economic Problems* (1932). I. Lippincott's little volume *What the Farmer Needs* (1928) is a read-

able and comprehensive survey. G. F. Warren and F. A. Pearson have written two books, *The Agricultural Situation* (1924) and *Inter-relations between Supply and Price* (1928), which include valuable studies of the factors affecting the prices of agricultural products. An exhaustive and unbiased study of *The Agricultural Problem in the United States* was published by the National Industrial Conference Board in 1926. E. G. Nourse's *American Agriculture and the European Market* (1924) demonstrates ably the difficulties resulting from the decline of European demand for American farm products. In *Harvey Baum* (1928), E. S. Mead and B. Ostrolenk show the effects of technological improvements in agriculture on farm production and costs, while the latter author gives a thought-provoking analysis of the position of our farmers and the operations of the Federal Farm Board in his *The Surplus Farmer* (1932). E. G. Nourse, J. S. Davis, and J. D. Black, in *Three Years of the Agricultural Adjustment Administration* (1937), give a competent and comprehensive appraisal of the AAA experiment. The coöperative movement can be studied in N. H. Comish's *Coöperative Marketing of Agricultural Products* (1929). J. D. Black's *Plans for Raising the Prices of Farm Products by Government Action* in *Annals of the American Academy of Political and Social Science* (March, 1929), sums up legislative efforts in the direction indicated prior to the 1933 legislation. Tho written some years ago, L. D. H. Weld's *The Marketing of Farm Products* (1916) is a very satisfactory analysis of market organization and problems, somewhat broader in scope than its title indicates. The annual *Yearbooks* of the United States Department of Agriculture afford valuable statistical and other information for the student of agricultural economics.

Secretary of Agriculture Henry A. Wallace's challenging little pamphlet, *America Must Choose* (1934), forcefully presents the dilemma in which we are placed by our agricultural surplus.

PART IV

THE DIFFUSION OF INCOME

CHAPTER XX

THE PROBLEM OF INEQUALITY

A. The Facts as to Inequality

Attacks on the Present Distribution of Income.—In Parts II and III of this volume we have been concerned, for the most part, with matters affecting the efficiency of production and exchange. We have been seeking to develop a program by which the flow of income from the nation's industry might be increased. We now turn to a quite different problem, the problem of distributing that income most equitably.

Probably no phase of our economic organization has been subject to more bitter attack than the system of distribution. Under that system the fruits of industry are very unequally divided. Some are rich and others are poor. There is a great contrast in the economic well-being of different classes in society. It is alleged that this inequality is very unjust, and this creates a great deal of discontent and radicalism. Most of the agitators who seek to bring about sweeping reforms of our economic order are more concerned with the defects in the distribution of income than with those in its production, and their suggestions for change are largely directed at correcting the principles by which the social income is apportioned. In this and the next two chapters we shall turn our attention to this question. We shall do so, however, not by indulging in the hasty, sweeping generalizations of the agitator, but by a careful analysis of all the issues involved. We must first find out what are the actual facts about the present distribution of income.

The Family Distribution of Incomes in the United States.—A careful estimate of the distribution of family incomes in this country in 1929 (and also of the incomes of individuals living outside of family groups) has been made by the Brookings Institution.[1] A summary of these figures is given in the table on the following page. The family distribution is taken rather than that of unattached individuals because the family is our typical spending unit. The situation shown is a serious one that gives real food for thought. Notice that, while a few are enjoying great riches, the great majority are relatively poor. There were about 24,000 families who had incomes of $100,000

[1] M. Leven, H. G. Moulton and C. Warburton, *America's Capacity to Consume* (1934). The figures include the usance value of durable consumers' goods and profits from the sale of property.

or more. This means fabulous luxury for these favored children of fortune—luxury beyond the wildest dreams of fairy tales. But the numbers of the rich are small. Only 600,000 families (2.3 per cent of the total) had incomes in excess of $10,000 and only about 2 million families (8 per cent) had more than $5,000. On the other hand, nearly 20 million families (71 per cent) had incomes of less than $2,500, while nearly 6 million (over 21 per cent) had less than $1,000 each. These people at the lower end of the economic ladder were in poverty, scarcely able to provide the necessities of life, and forced to eke out a sordid and miserable existence.

Summary of the Distribution of Family Incomes in 1929

Income Class	*Percentage of total Income*	*Number of Families*	*Amount of Income*
Under zero	-0.797	120,000	$ -615,000,000
$ 0– $ 500	0.773	1,982,000	596,000,000
500– 1,000	3.785	3,797,000	2,919,000,000
1,000– 1,500	9.333	5,754,000	7,197,000,000
1,500– 2,000	10.590	4,701,000	8,167,000,000
2,000– 3,000	16.321	5,192,000	12,586,000,000
3,000– 5,000	17.980	3,672,000	13,866,000,000
5,000– 10,000	14.031	1,625,000	10,820,000,000
10,000– 25,000	8.858	471,000	6,831,000,000
25,000– 50,000	4.336	97,000	3,344,000,000
50,000– 100,000	3.439	39,000	2,652,000,000
100,000– 250,000	2.806	16,000	2,164,000,000
250,000– 500,000	1.945	4,000	1,500,000,000
500,000–1,000,000	1.868	3,000	1,440,000,000
1,000,000 and over	4.732	1,000	3,649,000,000
Totals:	100,000	27,474,000	$77,116,000,000
Total incomes of unattached individuals			15,834,000,000
Grand Total of Incomes			$92,950,000,000

A good way to visualize the extent of this inequality is by means of the Lorenz curve illustrated in Figure 10. This shows the percentage of the total income received by different percentages of the population. The dotted straight line across the center of the square shows how the curve would look if our income were equally distributed. Thus, if each family received an equal share, 10 per cent of the people would get 10 per cent of the income, 20 per cent would receive 20 per cent of the income, and so on. The curved lines show the actual distribution for the years 1918 and 1929, respectively.[2] The extent to which these curves depart from the dotted straight line indicates the deviation of distribution from perfect equality. It is to be noted that this

[2] The 1918 curve shows *individual* incomes as estimated by the National Bureau of Economic Research. The curve for 1929 shows *family* incomes. The curves are nevertheless comparable, for the individual curve of 1929 coincides almost exactly with that for families.

deviation was greater in 1929 than in 1918, a fact which probably indicates that inequality becomes more extreme in periods of rapidly increasing prosperity (1929 was a boom year). The 1929 curve shows that the richest 5 per cent of our people received about one-third of the income in that year, and the richest 20 per cent got nearly 60 per cent of the income; the poorest 80 per cent, on the other hand, got less than 40 per cent of the total. Looking at the

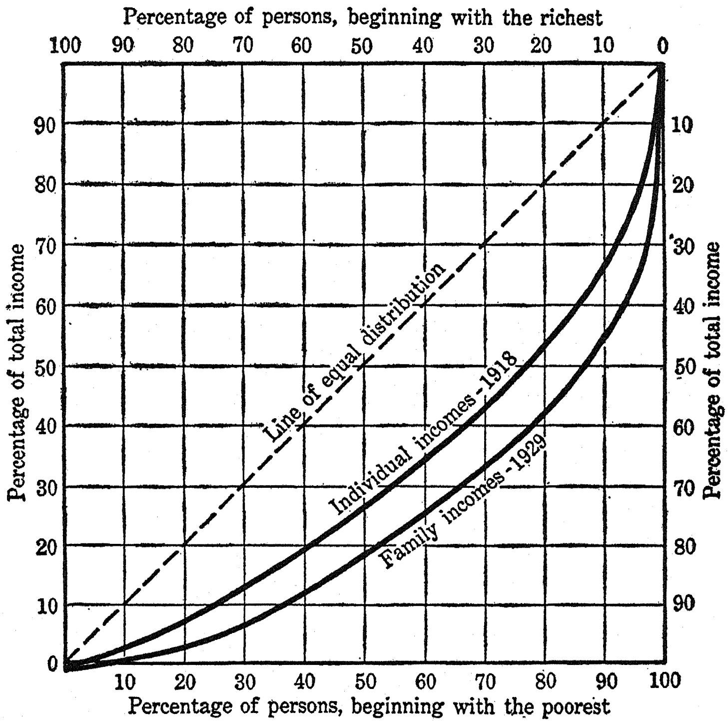

FIGURE 10. Lorenz Curve Showing the Distribution of Incomes in the United States, 1918 and 1929

matter a little differently, if we divide the 1929 income into two equal parts, one-half of it was paid to about one-seventh of the population, while the remaining half had to suffice for the other six-sevenths of the people. The inequality in 1918 was only a little less extreme. Were figures available for the years of the Great Depression, they would probably show a slightly less concentration of incomes among the rich, but the curve would still diverge significantly from the line of equality. In view of these facts we may well question whether our income is being diffused as widely as the maintenance of real social welfare demands.

Pareto's Law of Distribution.—Before going into the pros and cons of this question, however, we must pause to consider an argument which purports to show that the distribution of income can never be subject to human control. This argument is based upon the so-called law of distribution worked out by the Italian economist, Vilfredo Pareto. Pareto gathered statistics of income, based upon income tax returns, for a number of European countries in the nineteenth century. He found that if the distribution of these incomes was plotted in the form of a logarithmic curve, the curve would always turn out to be a sloping straight line. Because of this uniformity, the facts were taken to show that the distribution of income is always and everywhere the same. Some writers have concluded that distribution is governed by an immutable law and that therefore man cannot hope to change it. If this is true, it would be futile to pursue our inquiry any further, for of what use is it to discuss the pros and cons of inequality if we cannot do anything about it?

Careful analysis of Pareto's evidence, however, fails to confirm so pessimistic a doctrine. We cannot go into the mathematical technique of his method, but students who have done so point out that there is a slight difference in the slope of his curves, and in logarithmic diagrams such slight differences indicate much greater differences in the actual data. Furthermore, it seems probable that the reason why Pareto's curves have so similar a form is because his figures deal with countries whose institutions and economic organizations are very much alike. If we could change those institutions, we might find that we could materially change the distribution of income. Pareto's studies, therefore, cannot be said to show that the laws of distribution are immutable. Since the original appearance of his studies, Pareto himself has admitted this. We may hope that scientific knowledge of how distribution is at present determined may show us the way to change it in directions which we consider desirable.[3]

More Production versus Greater Equality.—Other writers have held that it is useless to consider the problem of inequality until we have increased our production much beyond the point where it now is. The total income of our country is so small, in their opinion, that, if it were distributed with substantial equality among the population, everyone would be in poverty, or near it. The whole of the surplus of our fabulously rich millionaires would not go very far, it is claimed, when divided among the millions of poorer persons who would have to share it. Therefore, if we could get the surplus away from the rich and divide it among the poor, instead of raising all to a plane of prosperous living, it would reduce the nation to a dead level

[3] For a more precise statement and criticism of Pareto's law than that here given, see A. C. Pigou, *The Economics of Welfare* (1920), Part V, Chap. II, and National Bureau of Economic Research, *Income in the United States, 1909–1918*, Vol. I, pp. 118–124, and Vol. II, Chap. XXVIII.

of mediocrity. Hence, the real remedy for low incomes is ever-increasing production, and not any change in the present system of distribution.

It is, of course, desirable to do all we can to increase our production. Parts II and III of this book were devoted to the advocacy of means to that end. But the above argument is not convincing; for, even if production were increased to the point where the poorest were able to live at a level of modest comfort, the contrast between their position and that of the richest might still cause dissatisfaction and raise grave doubts about the justice and desirability of the distribution. Moreover, in years of prosperity we have already attained a state where there is a social surplus—a national income adequate to maintain all of our people above the poverty line; yet poverty has not been done away with. It is entirely appropriate, therefore, that society should now seek to develop means whereby a fair share of this surplus can be as widely diffused as possible among the population.

How much is needed to support our population at a comfortable standard of living? According to the Brookings Institution, in 1929 there were approximately 27½ million families in the United States. Studies made by social workers from time to time indicate that, at the price levels prevailing in recent years, a family of five persons can be supported at a level of comfort on $2,000 per year, more or less.[4] This is for a family of five; but the average size of American families is only four persons, hence it would be more than adequate for our typical family. There would be needed, then, for family support, an income of 55 billion dollars. In addition to this there were in 1929 nearly 16 million individuals living outside of family groups to be provided for. If we allow $1,000 to each as sufficient for a fair standard of living, this makes an additional requirement of 16 billion dollars. Total requirements for consumption, then, would amount to 71 billions. The income produced in 1929 was 81 billions, leaving a surplus of 10 billion dollars to provide for replacement and extensions of capital and for higher standards of living. We may conclude that, in years of good business activity, if the income of the United States were evenly divided, the entire population would be able to live in a state of comparative prosperity.[5] In years of severe depression there would be a deficiency. In 1932 our income was only 40 billions, but such a depression is quite unprecedented, and it is to be hoped that it will not soon be repeated. In ordinary times we may count upon our production being kept up to our requirements.

Let it not be assumed, however, that the problem of inequality is identical with the problem of poverty. Poverty is not always the result of inadequate

[4] Dorothy W. Douglas, in the article on *Cost of Living* in the *Encyclopedia of the Social Sciences,* gives $1,400 as the cost of a "fair" standard of living for a family of five at the end of 1929. A "comfort" standard would run somewhat higher.

[5] It must be remembered that prices are merely the money measure of the various goods and services in our markets. If the national income were more evenly distributed than it now is, the demands for goods would be very different from what they now are, and the channels of production would be correspondingly changed. Hence it is not entirely accurate to argue

income. It may be due to unintelligent consumption—ignorance of how to use what income one has. Moreover, if poverty were eliminated, there might still be a great deal of inequality. Even tho no one was actually poor, some might be poor by comparison with the very rich, and there might still be much dissatisfaction. Our concern is with inequality as such, and with poverty only in so far as it is the result of unequal distribution.

B. Ethical Aspects of Inequality

Is Inequality Just?—The preceding discussion tacitly implies that the existence of extreme inequality is undesirable; but this should not be assumed without careful thought. Let us look into this question.

To many persons, inequality of incomes seems perfectly natural and right. No two individuals in the world are alike in physical appearance or mental peculiarities. We are unequal in strength, in intelligence, in tastes, and in talents. May we not conclude, therefore, that inequality is part of the plan of nature, and that differences in the incomes of different persons are as much to be expected as differences of any other kind?

The mere fact that a thing is natural does not prove that it is to be desired. The whole history of human progress is one of improving on the ways of nature. Moreover, it is difficult to justify differences in incomes by appealing to innate differences in human nature. The fact that human beings are unlike does not prove that they deserve unequal rewards. There may be differences in ability, but if one person has more talent or productive power than another, he cannot claim personal credit for that superiority. His talent is the result of inborn gifts or of favorable environment, for neither of which he was responsible. He has simply been more fortunate than his fellows. A human being is the product of numberless forces acting upon him. Some operate before his birth, and their results are innate in his very being; others come from home, family, friends, teachers, and general surroundings. In both cases they come from outside himself. One individual is favored with good heredity, refined home influences, a splendid education. He succeeds. Another may be born of weak stock and reared in a home of low moral character, with no place to play in but the gutter and no playmates but the hoodlums of the slums. He is taken out of school at the

that a redistribution of income would raise the standard of life exactly in proportion to the greater equality of income. In fact, we might expect that less would be produced of the articles now consumed by the very rich (because there would be less demand for them) and more would be produced of those things used by persons of moderate incomes. Just how this would affect their relative prices depends on the conditions which govern their production. Notwithstanding these considerations, the figures we have adduced suffice to maintain the general thesis, that our production would be sufficient to keep all of our people well above the poverty line if it were more evenly distributed.

earliest age which the law permits. He fails. Can the one be said to deserve his success and the other equally to deserve his failure? Rather it must be confessed that each is simply the product of society. The wealth of the successful man was made possible by parents, teachers, writers, and various other external influences. The poverty of the other was the result of influences of a more unfavorable nature. Both lives were directed by forces largely social in their nature. The rich man may, then, be said to owe something to society for his success, and society to owe something to the poor man for his failure.

Interesting as it may be to speculate upon such questions of abstract justice, it is not wise to determine a social policy upon such grounds. We must follow a more pragmatic method. The really important thing is to ascertain what are the effects of equality and inequality upon society. Knowing such effects, we may then be able to decide which is the more conducive to social welfare. With this end in view, let us pursue our analysis further.

Diffusion of Income Essential to Economic Welfare.—In the opening chapter of this work we laid down four essentials of economic welfare. One of these was an income sufficient to provide a comfortable standard of living for the people. Another was the wide diffusion of that income among the members of society. We have just learned that the United States today meets the first of these standards. Our income is adequate for the comfort of our people; but the facts of inequality show it to be so unequally divided that many of them, in fact, are not enjoying comfort. Here, then, is one evil result of unequal distribution,—poverty, with all its attendant suffering and disaster. A greater diffusion of our income can only be brought about by measures tending to distribute it more evenly.

Inequality and the Guidance of Production.—In Chapter XII we had occasion to analyze the functions performed by the price system in modern society. We noted that prices would direct production into the channels where they would best satisfy the desires of consumers were it not for one obstacle. That obstacle was the inequality of incomes. Under the price system production follows demand, and demand is made up of desire backed by purchasing power. Consumers' desires are effective in the market only in so far as they are supported by money income. Those consumers whose incomes are great can cause production to respond to their most trivial wants. Those consumers who are poor may be unable to get society to produce even for their most urgent needs. As a result, we make luxuries for some while we deny necessities to others. If the goal of economic welfare is maximum satisfaction of the wants of all, and not merely of a favored few, this situation is wrong; and if we regard consumers as human beings whose wants are equally valid, then it is wasteful to cater to the un-

important desires of some while ignoring the very pressing needs of others. The price system, therefore, can never be really satisfactory and economical until a greater measure of equality is achieved.

Economic Wastes of Inequality.—The extreme inequality which prevails in modern society is economically wasteful. There is waste at both ends of the social ladder. On the one hand, the surplus incomes of the rich are responsible for much idleness, dissipation, unhappiness, and demoralization. Many persons of great wealth—especially women—spend much time in the extravagant leisure of clubs, parties, resorts, travel, and the like, consuming without producing. Thousands of laborers and many valuable resources are employed in providing them with luxuries of little real worth, dissipating the social product to useless ends. Often this wealth weakens the characters of its recipients, especially the second and third generations, who had no hand in making it. Not all people of means are extravagant spenders, and many, perhaps most of them, are useful producers; but it can hardly be denied that among the very rich there is much waste of the sort described.

The influence of poverty, on the other hand, is no less disastrous. Undernourished, poorly clothed, improperly housed workmen cannot be efficient. Out of poverty grows disease, dissipation, vice, and crime. Here again is loss of productive power. If everyone received sufficient income to maintain himself in health and comfort, the vitality and morale of the working classes would be enormously improved, with consequent increase in their productive capacity.

There is waste, too, in the social discontent that springs from inequality. Extremes of wealth and poverty make possible the agitation of radicals and the resulting dissatisfaction of the masses. Strikes and other forms of social disorder are partly the result of this situation. A society, none of whose members were really poor and none extravagantly rich, might prove to be one of more contented, wholesome, and vigorous people, whose production would be at a maximum level and all of whose really legitimate wants would be amply provided for.

Inequality and the Law of Diminishing Utility.—A strong argument against the inequality of incomes can be derived from the law of diminishing utility. This law states that, as an individual consumes increasing units of any good, the amount of utility derived from each additional unit decreases. Now this principle is true not only of a particular good but of one's income taken as a whole. As our income increases beyond a certain point the extra enjoyment derived from each addition to it grows smaller. It is not likely, for instance, that a man with a million dollars yearly income gets five hundred times as much enjoyment from it as a man who receives only two thousand dollars. Some economists express this idea by saying that the law of diminishing utility applies to money. Compare the amount

of satisfaction obtained from five dollars worth of goods by a man with an income of a hundred thousand dollars with that obtained from a five dollar purchase by a man with an income of only one thousand dollars. The former may spend the money for a banquet without a moment's hesitation, yet the banquet is not necessary to him. It gives him an hour's fleeting pleasure (possibly followed by a night of indigestion), and then it is gone. He derives but little utility from his expenditure. The poorer individual cannot afford to squander five dollars in this way. He must apportion his money with care. He might, for instance, purchase a pair of shoes or a week's supply of groceries with that sum. The rich man has so much that five dollars more or less makes very little difference to him. The poor man has so little that five dollars more or less is a matter of great importance, for it may mean the having or not having of some article very necessary to his comfort.

We may illustrate this in another way. Suppose the table below to represent the number of units of utility enjoyed by two individuals—A, whose income is supposed to be $3,000, and B, who is assumed to receive $9,000.

UTILITY IN RELATION TO INCOME DISTRIBUTION

Successive units of income	Unequal distribution		Equal distribution	
	Utility enjoyed by		*Utility enjoyed by*	
	A (*Income* $3000)	*B* (*Income* $9000)	*A* (*Income* $6000)	*B* (*Income* $6000)
1st $1000	1000	1000	1000	1000
2d $1000	1000	1000	1000	1000
3d $1000	900	900	900	900
4th $1000	....	800	800	800
5th $1000	...	700	700	700
6th $1000	...	600	600	600
7th $1000	...	500	...	...
8th $1000	...	400	...	...
9th $1000	...	300	...	...
Totals	2900	6200	5000	5000

We may suppose that each dollar yields one unit of utility until the income amounts to $2,000 a year, after which the principle of diminishing utility begins to operate. Accordingly, we have represented the increments of income above that amount as yielding a progressive decrease in enjoyments. On this basis, A receives a total of 2900 units of utility from his income of $3,000, while B receives 6200 units from his $9,000. If we could transfer some of B's income to A, the latter would gain far more

in utility than the former would lose, and the total satisfaction of the two individuals combined would thereby be increased. If we transferred \$1,000 from B to A, B would lose 300 units of utility and A would gain 800. A second such transfer would increase A's satisfactions by 700 units, with a loss of 400 to B. A little experimenting with the figures will show that the total satisfactions of the two men are at their maximum when each is receiving \$6,000. To transfer any further income from either party to the other after this point had been reached would be to deprive the one of more utility than was gained by the other, resulting in a net loss to the pair.

This simple example illustrates a principle that is applicable to the community at large. If by some means a system of distribution can be devized which will reduce the incomes of the very rich and add to the incomes of the very poor, the loss to the wealthy would be more than made up by the increased enjoyments of the poor, and the net psychic income or real satisfactions of society would be increased.

One cannot carry this reasoning, however, to the conclusion that perfect equality of incomes is the most desirable condition of distribution. Perfect equality would not lead to maximum satisfactions, because human beings are not all alike. They do not have the same needs, the same tastes, nor the same capacities for enjoyment. The person of artistic temperament craves artistic surroundings, and esthetic pleasures such as music, painting, and the like. A person of more common clay may be contented with much simpler and more easily obtainable enjoyments. So infinite is the variety of personal characteristics and needs that it cannot be said that a mathematical equalization of incomes would produce the maximum social well-being.

Inequality as an Incentive to Production.—Moreover, there is another and perhaps stronger argument against the maintenance of perfect equality. The inequality which now exists is one of the principal devices upon which we rely for securing efficiency in production. It is the desire for riches which is the principal motive to industrial achievement. Men strive not so much for wealth itself as for the recognition and superiority over their fellows which it brings. In Chapter II we had occasion to observe the desire of men for distinction and for the opportunity to show their superiority by the display of wealth. Altho we there criticized this use of wealth as foolish and extravagant, we cannot deny that the desire for this prestige is a powerful motive in human beings and that men will make great efforts for its sake. Altho one can acquire riches in unproductive ways, it is also true that many of the conspicuous productive achievements of our civilization have been made under the stimulus of this powerful incentive. Business men are induced to organize their plants efficiently, to keep their costs low, to improve their productive technique, to find new commodities with which to appeal to consumers—all in response to the desire for pecuniary gain. The influence of this motive is not con-

fined to the leaders of business, but permeates the rank and file of labor. Each workman knows that his income depends upon his productive efficiency, and that if he can become more skilled and more competent than his fellows, he can raise his income above theirs. The desire to rise is always driving him on to better his accomplishments.

If we reduce all incomes to the same level, we will lose the force of this incentive. If no one is paid any more than anyone else, no matter how great his ability or his exertion nor how much more valuable his service, men may feel that there is no use in striving to do their utmost. On account of this, many people believe that if all incomes were brought to the same level industry would be plunged into a slough of stagnation. Production would decline and progress would be slow or non-existent.

Production is not the only goal of economic activity. A nation with a moderate income, widely diffused, might be more prosperous than one with a much larger income, so concentrated in the hands of a favored class that the masses of the people were in poverty. Hence, some loss in productivity might be tolerated if by that means we could obtain some increase in the incomes of the poorer classes. But the economic surplus of this country is not large enough to permit very much reduction in the total output of industry. A serious loss in productivity would plunge the whole nation into poverty, and this would be too great a price to pay for the purchase of equality. It is better that few should be well off than that all should be poor. This consideration gives force to the argument against any program for the attainment of *perfect* equality.

Unequal Incomes Play a Useful Rôle in the Economic Process.—The above argument in favor of some inequality of incomes is further supported by the fact that the present system of distribution, involving some differences of incomes, performs a useful function in promoting economy in our industrial organization. These functions will presently be explained,[6] but they should be mentioned here as having a bearing upon the general problem.

A Reasonable Policy.—We are now in a position to bring together the threads of our argument and arrive at a conclusion. We have seen that, altho the income of the United States is more than adequate for the comfort of everybody, it is so unequally distributed that a large proportion of our population is in poverty. We have seen, too, that such inequality is hard to justify on ethical grounds, that it results in a considerable amount of productive waste, and that it dissipates economic goods in the satisfaction of trivial wants. On the other hand, we have seen that perfect equality might be disastrous. A reasonable policy, therefore, would be to seek a golden mean in this, as in other things. Not the complete equalization of incomes, but a reduction in the amount of inequality that now

[6] See below, p. 435.

prevails, should be our goal. We should seek to devize some means whereby the incomes of the rich would be less excessive than they now are, and there would be a more general diffusion of the social product among the masses of the people. Such a program must be formulated with care. We can only hope to achieve it by studying carefully the present system of distribution and the laws which govern it. When we thoroly understand those laws we can apply the knowledge so obtained to the solution of our problem, but to thrust a ramrod into the delicate machinery of distribution without such knowledge would prove disastrous. Let us therefore consider the present distributive process, with a view to ascertaining what changes in it we may hope to effect with some prospect of success.

C. Standards of Distribution Policy

The Present Distributive Process.—Under the process of distribution now prevailing, the income of a community is paid in the first instance to those persons who own or control some fundamental productive agent. Whoever is in a position to supply artificial capital, land, labor, or management can claim a share of the industrial product. The four primary shares in distribution are, accordingly, the interest on artificial capital, the rent of land, the wages of labor, and the profits of business enterprize. All of the product of industry is paid out in these forms, and no one who has not contributed one of these productive agents can obtain any of it except thru transfer from those who have so contributed.

How much is paid for the use of any of these agents is determined by competitive price bidding. According to the current theory, the price established for artificial capital, land, or labor is determined by the value of that agent's marginal contribution to product. This involves the principle of diminishing productivity, which is as follows: In any productive operation in which a number of productive agents are employed, increasing any one of those agents relative to the others will, after a certain point has been reached, yield less than proportionate increases in product. It follows from this principle that those agents which are most abundant are worth the least, because their marginal productivity is low. Every agent of production has important uses, but if its supply is very large, some of it must be employed in less important ways. The available supply of such an agent will not be fully utilized until its price has fallen to what it is worth in those least important, or marginal, uses. For example, a certain amount of unskilled labor is indispensable in industry, and, were it very scarce, such labor might command high wages, because employers would be willing to offer high prices in competition with one another to secure it. But if such labor is very plentiful, it cannot all be employed in these indispensable occupations. Some of it must be utilized in tasks of less necessity. Em-

ployers will not find it worth while to hire it for these trivial uses until the wage has fallen low. The result is that the large supply of such labor brings the wages down to the value of its product in these marginal employments. The same principle applies to land and artificial capital. The correspondence of distributive shares with the value of the marginal product, however, is only approximate. Considerable deviations from it occur from time to time.

The share of business enterprizers is determined in a different way. There is some tendency for them to get a return for their capital and for their labor of management corresponding to prevailing rates of interest and wages. But it is a tendency interrupted by the peculiar position which the business enterprizer holds as a risk-taker. As the head of a business producing in anticipation of future sales, he must pay prevailing rates for his hired labor and borrowed capital, taking his chances on getting a price later that will yield some surplus for himself. His profits are, therefore, in the nature of a residual share, fluctuating widely with changes in market conditions; and there is often a loss instead of a gain.

This exceedingly brief account indicates that the relative scarcity of different kinds of labor and capital determines the rewards which laborers and capitalists receive, while the amount of profits accorded to enterprizers is subject to great variation caused by the dynamic changes of industry. Since some agents are much more scarce than others, relative to the need for them, the amounts paid for their use vary from high to low. So we have great differences in wages, in the rates of interest yielded by different investments, in the returns of different sorts of land, and in the profits of business enterprizers. That is how inequality arises.

Functions Performed by the Distributive Process.—This process of distribution plays an important part in the economy of the present economic organization. It is part of that general price system whose rôle was explained and defended in Chapter XII. In fact, the shares of income are simply the prices of productive agents which, as costs, play a part in the fixing of commodity prices. In particular, payment for the use of productive agents on the principle just outlined performs three useful functions:

(1) By having high prices for those agents which are scarce and low prices for those which are plentiful there is provided an inducement to increase the supply of scarce agents, while the increase of those which are already too abundant is discouraged. If there is a dearth of electricians at a time when there is an excess of glass-blowers, the high wages of the former and the low wages of the latter stimulate young men to become electrical apprentices and put pressure on glass-blowers to learn some other trade. If capital in undeveloped regions is scarce, a high rate of interest will be paid for it, thereby encouraging capitalists to invest their surplus

funds there. Even land will be increased in supply to some extent under the stimulus of high rents, thru the drainage of swamps or the irrigation of deserts.

(2) The setting of prices according to the scarcity of productive agents also promotes economy in their use. We are usually most careful of those things which are most expensive. Business men are likely to watch with care the capital and labor which is most costly, thereby avoiding waste. The most important aspect of this is found in the principle of substitution. It is often possible to perform the same operation in industry by different combinations of productive agents. One may move heavy materials by men with wheelbarrows, representing little capital and much labor, or by cranes and mechanical conveyors, representing much capital and little labor. If capital is very scarce, social economy would dictate that it be done with labor. If labor is scarce and capital abundant, the other method should be used. The pricing of agents according to their scarcity makes it to the interest of an employer to follow this policy. He tends always to employ that agent which accomplishes the desired work with the least cost. A wise manager does not hire a skilled laborer to do work which can be done by an unskilled workman, for by using the latter he can save the difference between their wages. Were it not for this wage difference it would be a matter of no moment to him which type of man he employed, and men of ability might be withdrawn from important tasks to do work which might easily have been done by a less valuable type of labor. The principle of opportunity costs is a factor in promoting this economy, for it forces each employer to pay for an agent a price as high as that agent might be able to command in its possible alternative employments. This tends to prevent the use of any agent for any purpose less valuable than the other purposes to which it might be devoted.

(3) Finally, the residual nature of profits, fluctuating—as they do—with the dynamic changes of industry, holds up before the enterprizer the possibility of large gains from the efficient conduct of business and the penalty of losses for inefficiency. As we have seen, it induces him to manage his business with care, keeping his costs low, avoiding wastes, producing the things that find favor in the eyes of consumers, and promoting general productivity.

It must not be supposed that these advantages are attained without some disadvantages. We have already seen that the present distributive process results in inequality and that this in itself is an undesirable condition. It is also true that people are not always paid according to their social importance, that some get wealth without producing, and that fortunes have been made by monopolistic restriction, financial sharp practices, and other anti-social means. We shall learn more of these things as we proceed; but we should bear in mind that the distributive process of the present system does contain

certain elements of usefulness which should be recognized in considering any program of reform.

Alternative Systems of Distribution.—Some reformers, particularly socialists, would have us overthrow the present method of apportioning incomes entirely, to substitute for it some system regarded by them as superior. There are several different bases on which payments to individuals might be made. One proposal is to give to each according to his needs. This is a high ideal, perhaps the highest that can be conceived. It would greatly lessen the degree of inequality now existing, but would not result in perfect equality of incomes. Remuneration in accordance with need would strive to give to each individual the amount and kind of income which would provide the fullest possible opportunity for the perfect development of his capacities. The man of artistic temperament would receive the means to travel and study the great works of art thruout the world, and to afford that type of esthetic and cultural environment which is necessary to the bringing out of genius. The man of mediocre mental capacity, such as the ordinary manual worker, would need to be provided only with sufficient means to afford a comfortable home, a decent amount of leisure and simple recreations. In practice, however, it would be impossible to measure the needs of different individuals. The attempt to apply this principle in actuality would necessarily result in substantial equality in incomes.

Another possible basis of distribution would be to reward each in accordance with his sacrifice. However, it is impossible to measure accurately the amount of sacrifice that work involves for different persons, or the relative disutilities of different occupations. Moreover, this principle assumes that each individual has equal capacity for employment, which is not true.

Yet another possibility is simply to divide the product of industry equally among all. The undesirability of this has already been exposed.

Any of these principles would lead to a much more nearly equal distribution of income than that to which we are accustomed, and in this respect they might prove advantageous. They would involve so sweeping a change of the whole system of industry, however, that few people are willing to consider them seriously. Inasmuch as they would completely divorce reward from productive efficiency, it is doubtful whether they could succeed. In any case, they could only be applied by the complete abandonment of the price system, and therefore they could not be established under a régime of free enterprize and competition. They could only be realized under a social organization such as socialism or communism. We had better postpone a further discussion of such projects, therefore, to the chapter which deals with those subjects. We shall find that even most socialists do not regard these suggestions as practicable. No matter what plan of distribution or social organization is established, sound economy requires that the three functions performed by the distributive process should somehow

be accomplished. This establishes a presumption, tho not a conclusive one, in favor of the present system. Is it not possible to correct the most flagrant evils of inequality without entirely destroying that system? A careful analysis may show that we can so modify its operation as to solve our problem, while yet retaining its advantages. This will be our method of approach to the problem. Let us see in how far the present arrangements are indispensable, and what modifications can be expected to achieve some measure of success.

Earned and Unearned Incomes.—It has already been hinted that some of the incomes received by individuals in the present system are justifiable, while others are not. We must now endeavor to set up a standard by which we can test their justifiability. Incomes have frequently been classified as earned and unearned, the presumption being that the former are to be defended while the latter are not. These terms are not altogether satisfactory because of their ambiguity, it being very difficult to say with certainty just when an income is earned and when it is not.

Perhaps most persons would regard that income as earned which is received as the result of one's own exertion and ability, but this is a doubtful test. One may utilize his abilities and exert himself diligently in undesirable ways. This is precisely what the swindler does when he foists an issue of bogus stock upon thousands of innocent investors. Moreover, it is difficult to defend differences in earnings resulting from differences in ability and perseverance on any abstract principle of ethics. There is no such thing as a self-made man in any real sense. Success comes to those who have been exceptionally well endowed by heredity or who have been especially favored by environment. Failure, likewise, is the result of constitutional weakness or unfortunate surroundings. Even the men who appear to work themselves up from poverty to positions of affluence or prominence in the face of many obstacles must credit their achievement to the unusual qualities of mind and body with which they were favored by birth. The mere possession of superior qualities, therefore, is not in itself a satisfactory justification for exceptional payment.

We must seek a pragmatic standard. In the last analysis that is good or right which leads to desirable results. The payment of income to an individual is justified, therefore, only if it can be shown that it conduces to the social welfare. If the effect of paying high profits to business men improves the well-being of the members of society, it is good for us to pay such profits, and not otherwise. We must apply the test of social expediency. If we wish to retain the words earned and unearned as applied to incomes we may do so, provided we use them in this sense: that income is earned which is socially desirable and that one is unearned which is socially undesirable. But this forces us to seek some test of social desirability.

Social Welfare as a Test of Earned Income.—When does an in-

come contribute to the social welfare? One writer[7] has suggested that the enjoyment of any right in society should be contingent upon the performance of some useful function. No one should be given a privilege save for the fulfillment of a duty. This suggests that the enjoyment of income should be associated with the performance of a productive service. As things now are many people receive who contribute nothing to industry.[8] What social good is accomplished by the payment of income under these conditions? If income were paid only to those who contribute to production (except for minors and other dependents), each one would be forced to employ himself productively in order to obtain a livelihood. Thus would we encourage, and in fact compel, the performance of service to the community for the enjoyment of the right to income.

But this in itself is not enough. The amount of income paid for the service should be dependent upon the amount of the service rendered. We cannot measure such services in terms of weight or volume. No scientist has yet given us a yardstick of social welfare. The market where productive agents are hired, however, supplies a pecuniary measurement. If that market is free from monopoly and interference, it fixes the value of productive agents thru the collective judgment of business enterprizers as to their usefulness in production. The price which would attach to a service in a free competitive market, therefore, is a good criterion for its valuation. If an individual is paid more than the competitive value of the service he renders in production, his income is too high; and if he is being paid less, his income is too low.

Here, then, we have two tests to apply to income. If we desire to use the word *earned* to describe those incomes which we believe conducive to the social welfare, we may define *earned income* as follows: *That income is earned by its recipient which is paid for a productive service rendered by him, at a price equal to the competitive market value of that service.* It follows that that income is *unearned* (1) which is received without the rendering of a corresponding service in production, or (2) which is paid for at a rate exceeding its competitive market value. This standard of earnings accepts the present distributive process as sound, in so far as the fixing of prices for productive agents is concerned. Therefore it will lead us to no serious disturbance of the present price system. Our further analysis will show, however, that it suggests important measures which, if adopted, will lead to a considerable reduction of inequality.

Property and Service Incomes.—A distinction may be drawn between those incomes which are derived from the ownership of property and those which are obtained by the performance of labor. These may be designated as *property incomes* and *service incomes*, respectively. Critics

[7] R. H. Tawney, *The Acquisitive Society* (1920).
[8] Proof of this will be given in the following chapter.

of the present economic order, especially socialists, have frequently attacked all the property incomes as wrong, because they claim they are unearned. Income from labor, on the other hand, they defend as being earned by the laborers. Under socialism, therefore, interest, rent, and pure profits, being property incomes, would be abolished, while only wages, including wages of management, would be allowed to exist. In the next chapter we will analyze each of the shares of income in turn, applying to it the twofold test developed in the preceding paragraph. We will see that the socialist denunciation of all property incomes and defense of all service incomes breaks down when closely scrutinized. We will find that some property incomes are clearly earned, tho many of them are not. On the other hand, we will find unearned elements in wages. The socialist treatment of this question is therefore inadequate.

Summary

The present unequal distribution of income has been severely criticized. Statistics show that while the major part of the social product is received by labor, there is conspicuous inequality in the incomes of different individuals and families. A few of the very rich receive a very large share of the total national income, while the masses of the people live at very modest standards, many of them in poverty. Pareto's statistics, showing a similarity in the distribution of income in European countries, do not prove that the laws of distribution are immutable. Moreover, the income of the United States today is adequate to maintain our people at a comfortable level of subsistence. There is reason to believe, therefore, that a program for the reduction of inequality is feasible.

The desirability of such a program is strengthened by a consideration of the ethical aspects of inequality. Inequality cannot be justified on the ground that human beings are different, for the differences are accidental, not deserved. Inequality is an obstacle to that diffusion of incomes which is essential to economic welfare. It prevents the price system from performing its function of directing production into the channels of maximum need. It interferes with productive efficiency by maintaining an idle leisure class, by dissipating wealth, and by interfering with the health and morale of labor. The law of diminishing utility shows that some gain in satisfaction would result from a greater measure of equality. On the other hand, the rôle played by unequal incomes in providing an incentive to production suggests that a drastic leveling of incomes would be unwise. A moderate program for the reduction of inequality is therefore advisable.

Moderation is further suggested by considering the present process of distribution, which apportions income according to the marginal productivity of the productive agents. This effects economy by encouraging the

increase of scarce agents, by discouraging waste in their utilization, and by awarding profits to efficient enterprizers. Other proposed systems of distribution, such as payment according to need, sacrifice, or perfect equality, offer less promise of success. Not all incomes now received are earned, however. By earned income we mean one received in payment for a service rendered, at its competitive market value. Unearned incomes should be prevented. We cannot class all incomes derived from property as unearned, and those derived from labor as earned. Each kind of income must be separately analyzed.

SUGGESTIONS FOR FURTHER READING

The income studies of the National Bureau of Economic Research provide valuable statistical data on the size and distribution of the income of this country in recent years. This material is contained in *Income in the United States, 1909–1918* (2 vols., 1921), *Income in the Various States, Its Sources and Distribution, 1919, 1920, 1921* (1925), and *The National Income and Its Purchasing Power* (1930). Volume I of the first named gives their method and findings to 1919 in summary form. For figures from 1850 to 1910 see the useful study of W. I. King, *The Wealth and Income of the People of the United States* (1915). Leven, Moulton and Warburton's study of *America's Capacity to Consume* (1934) contains a careful estimate of income distribution in the year 1929. Maurice Leven's *The Income Structure of the United States* (1938) presents some significant data on the distribution of income in this country along occupational, geographical, racial, and class lines.

Literature dealing with the ethical aspects of inequality is fragmentary and scattered. Good discussions, somewhat conservative in tone, are to be found in F. M. Taylor, *Principles of Economics* (1921), Chaps. XLII–XLV; T. N. Carver, *Essays in Social Justice* (1915), especially Chap. VI; and Hugh Dalton, *Some Aspects of the Inequality of Incomes in Modern Communities* (1920), Part I. For more radical criticisms of the present system of distribution, see Scott Nearing, *Poverty and Riches* (1916), R. H. Tawney, *The Acquisitive Society* (1920), R. H. Tawney, *Equality* (1929), and the literature on socialism cited at the close of Chapter XXVIII.

For a more popular presentation of the point of view, elaborated in this and the following chapters, on the problem of inequality and its treatment, see R. T. Bye and R. H. Blodgett, *Getting and Earning* (1937).

CHAPTER XXI

AN EXAMINATION OF THE SHARES OF INCOME

A. The Interest on Savings

Attacks on Interest-Taking.—Pursuing the analysis suggested at the close of the last chapter, we shall first consider that share of income paid to capitalists in the form of interest on savings. We are not for the moment concerned with the income derived from land but only with the interest on artificial capital.

The taking of interest for loans of capital has been denounced as improper by one group of critics or another from the earliest times. Today the chief attack comes from the socialists, who denounce this form of income, along with all other revenues derived from property. They argue that labor, working with land, produces all wealth, including the very instrumental capital from which interest is derived. The capitalist, as such, produces nothing; he merely owns, according to their analysis. Therefore, the laborer should receive the full product of his industry, and if the capitalist deducts interest to put it in his own pocket, he is robbing labor of what is its just due. In a socialistic society all the capital would be owned by the people collectively, thru some form of communal or state organization. No interest would be paid to private owners, and all the product would go to the workers. This argument has been made so repeatedly and vehemently, and it is on its surface so plausible, that it must be carefully considered. We can arrive at a correct judgment concerning it if we will analyze the nature and causes of interest.

Why Interest Is Paid.—How does it happen that capitalists are able to obtain interest for the use of their savings? This query involves two other questions,—namely, why are borrowers willing to pay for the use of such savings, and why do they have to pay for them? The answers to these questions should not be difficult for anyone who is conversant with the principles of economics. The chief borrowers of funds are business men who desire to secure instrumental capital for use in their businesses. The modern process of production is a roundabout one, in which much labor and material must first be put into instruments and equipment of various kinds before consumers' goods can be created. This instrumental capital can come into existence only thru a process of saving. Those who have

more current income than is necessary to meet their immediate needs use it to hire labor and purchase materials for the production of factory buildings, machinery, tools, and the like. This material equipment will then yield consumers' goods at some time in the future. It has been found that this roundabout method of production yields a much larger flow of consumers' goods in the long run than the more direct, non-capitalistic methods of primitive industry. Hence, the use of instrumental capital in production yields a surplus not obtainable without it. Borrowers of capital, knowing that this surplus will be at their disposal, are able and willing to pay a portion of it to the lenders whose savings make it possible. As an illustration of this, let us suppose that a steam railroad is to be electrified. The conversion requires a great deal of preliminary expenditure for the manufacture of dynamos and overhead wires, the erection of power plants and poles, and the building of new locomotives or cars equipped with the necessary electrical apparatus. When the transformation is complete a great many more passengers can be transported for a given amount of expense than before. Consequently, the proprietors of the line will be glad to pay a portion of their gains to investors who can lend the necessary funds for the conversion.

A great many borrowers are consumers who desire to obtain possession of fixed capital for the improvement of their standards of living. They may borrow to build a home, to equip it with labor-saving devices, such as electric refrigerators, washing machines, and vacuum cleaners, or to purchase an automobile. They are willing to pay interest for the use of such capital in order to have it now instead of waiting until they have been able to save sufficient funds to purchase it outright. If one desires to own his own home, it might be many years before he could accumulate sufficient savings from his income to pay the cost thereof. Old age would be upon him, and he would have very little time left in which to enjoy it. To secure it now and partake of its benefits thruout his lifetime he is quite willing to pay interest to a lender who will finance the project. Consumer-borrowers pay interest because they value the use of the capital for which they pay more than something else which might be purchased with the money.

This explanation shows us why borrowers are willing to pay interest, but it does not tell us why they have to pay it. They must pay it under the present system of free enterprize because the fund of savings thru which new capital can come into existence is scarce, and all useful scarce things command a price on account of the competition of consumers, who bid to secure them. One can save only by doing without consumers' goods. Those who enjoy very large incomes can do this easily, but the number of such persons is not very great. Those with more moderate incomes can save only at some sacrifice to themselves, and the amount which they can

accumulate even by such sacrifice is small. As a result, the fund of savings is limited in amount. Hence the use of it commands the payment which we call interest.

The Social Functions of Interest.—The payment of this interest performs important functions in the present system of social economy. In the first place, it serves to regulate the relative amount of productive activity which shall be devoted to future as distinguished from present needs. Saving and investment is a process of withdrawing resources from use for present consumption in order to provide future income. For example, when funds are invested in the construction of a railway, labor and materials which might have gone into immediately consumable goods are put into the form of capital whose benefits will not begin until after two or three years of construction and will not be fully recouped until the passage of a long period of time. It is important that a judicious balance between provision for present and future wants should be maintained. If there is too much saving, present enjoyments may be curtailed to the point of actual deprivation, which is poor economy. On the other hand, if we consume too much now and fail to provide enough new capital to increase our enjoyments in the future, productive progress is greatly retarded, and may even be stopped. The interest rate, thru its effects on the accumulation of savings, helps to maintain a balance between the provision of present and future wants. If there is too much investment in fixed capital at the expense of present needs, two things will happen. The temporary scarcity of consumers' goods will raise their prices, forcing consumers to spend more for them, and to save less, than hitherto. At the same time, the excess of capital will reduce prospective earnings, so that the interest rate will fall, and there will be less inducement to save. Thus the maladjustment will be corrected. On the other hand, if there is too much production of present goods and insufficient provision for the future, the prices of consumers' goods will fall, leaving consumers more surplus to invest. Meanwhile, the scarcity of capital will cause interest to rise, thereby encouraging such investment, until balance is restored once more.

Also, interest helps to direct the investment of savings into the most valuable channels. Since the fund of savings is scarce, it must be economized. Economy requires that it should be employed only where it is most useful. We have already seen how, if there were less inequality, the price system would serve to direct industry in accordance with this principle. The interest rate is part of the price system which accomplishes this. If there is overinvestment in any one industry, earnings therein will decline until enterprizers can no longer pay the prevailing rate of interest on their capital. This will prevent further investment of funds in that industry and check the overexpansion. On the other hand, if some line of production is underdeveloped, the prices of its products will rise until earn-

ings become great. Then enterprizers will offer higher interest to lenders of capital for such uses, thereby attracting investment and bringing about the needed expansion.

Could Interest Be Abolished?—In any system of social organization these functions would have to be performed somehow. There are economists who have gone so far as to say that the interest rate provides the only satisfactory method of performing them, and that because of this even a socialistic state would find itself compelled to resort to interest payments.

It is conceivable, however, that under socialism interest might be abolished. In such a society capital would be collectively owned by the state. The state could decide how much new capital to accumulate by an estimate of present and future needs without reference to any interest rate, and it could then lay aside out of its current revenues sufficient funds to provide for this capital. Since it would not have to rely on private saving, it would not be necessary to offer anyone the inducement of interest, and a council or commission might be appointed to decide how much investment was needed. If the socialistic state maintained a system of exchange and prices, however, it would be natural for it to base its prices upon costs; and in its system of cost accounting it would be wise to figure interest upon the capital used, whether it was called by that name or not. Otherwise it would have no means of allowing for the costs of employing capital in production. But here it would be merely a bookkeeping device, and no interest would actually be paid to private capitalists for the use of their funds.

Our present concern, however, is not with socialism, for we are endeavoring to work out a program for the reduction of inequality without so radical a departure from the system of capitalism. The payment of interest appears to be unavoidable so long as we have free enterprize and competition. There is no other way for the functions just described to be performed. We need have no reluctance in coming to this conclusion, for there is no reason to regret the payment of such interest. It can readily be shown that it is quite justifiable and that the socialist argument, which holds interest to be robbery, is faulty.

The Justification of Interest.—In the previous chapter we set forth the tests by which we could judge of the justness of any form of income. We said that that income is earned (and therefore justified) which is payment for the performance of a service at no more than the fair competitive price of that service. Our analysis of interest indicates that the capitalist does perform a service to the borrowers from whom he receives interest. His savings bring to the producer-borrower that surplus product which the roundabout process yields, and they give to the consumer-borrower the immediate use of valuable durable capital which it would take him years

to accumulate from his own resources. The rate of interest is fixed in a competitive market. It therefore meets our second test. Nor is this rate usually high; on the contrary, it is generally quite moderate, not ranging much above 5 or 6 per cent per annum. It is further justified by the fact that, for those whose incomes are moderate, saving involves some sacrifice, to induce which it may be expedient to offer the reward of interest. This is a consideration that will be of greater weight as incomes become more equally distributed.

It is not true that labor is robbed of its due when interest is paid to capitalists. It is true that all artificial wealth is produced by labor, both manual and mental, working with land; but the product of most laborers in present society is a future one. Most people are employed in manufacturing goods not for immediate consumption, but to be used in the production of consumers' goods at some later time. This roundabout process would not be possible unless there was available a surplus of present income by means of which laborers working on future products could be supported, and even the presence of such surplus would not insure the continuance of roundabout production unless those who have the surplus were willing to devote it to that purpose. The capitalist, by saving his surplus and investing it, does this. His investments very largely take the form of an *advance* of wages to laborers. The laborer is paid from day to day or week to week in present goods. He receives immediate payment for a future product. He can hardly expect to claim now the full value of what he is producing, when that product is not yet available. If labor was able and willing to wait for its product to assume its final form in consumers' goods, it could get it all; but this would mean doing without wages in the present—a proposition that would not appeal to laborers. Of course, labor is not in a position to wait for the final culmination of the roundabout process, because it does not have the surplus to live on in the meantime, but the absence of such a surplus is not in itself the result of interest-taking. It is the result of those general causes which make for inequality.

In fact, as Professor Carver points out,[1] attacks upon the institution of interest nearly always confuse it with other issues. They think of the rich capitalists who live upon the income from large fortunes without working and they contrast this with the relatively low incomes earned by those who are forced to obtain their living by arduous toil. But interest is not responsible for this condition. No one ever made a fortune by receiving interest on capital. It is true that people inherit riches and then live on the interest therefrom, but the cause of this situation is in the institution of inheritance, not that of interest. Again, people become millionaires in some business venture and then may live on the interest from the millions. But if this is objected to, the remedy lies in preventing the amassing of such

[1] T. N. Carver, *Essays in Social Justice* (1915), Chap. VIII.

fortunes, not in abolishing interest. There is no reason why the institution of interest need be interfered with. It is an earned income, the payment of which performs useful functions. The key to the problem of inequality lies elsewhere.

B. The Rent of Land

The Nature of Land Rent.—We now turn to consider the income derived from land. Under capitalism, most of the land is owned by private landlords who receive a rent for its use. If they cultivate the land themselves, they get the rent in the form of products. If the land is leased to tenants, they receive it in the form of money payments. We are now concerned only with that part of this income which is derived from the bare land itself. We must distinguish this carefully from the return which may be attributed to improvements on the land, such as buildings, fences, roads, drainage, and the like. All such improvements are artificial capital, which was created thru the investment of savings. According to the analysis of the preceding section, the capitalist is justly entitled to interest on such investments. A landowner, however, very often receives from his real estate an income in excess of such interest on the value of the improvements. The surplus he obtains is due to the value of the land itself, as a site, or mere piece of ground. This bare land is natural capital, as distinguished from the artificial capital represented by the improvements. It is the rent derived from such natural capital that we are now to study.

In colonial America, vast acres of unused land abounded, while settlers were few in numbers. Under these conditions the land was practically free. About all that was necessary to secure ownership was to clear a piece of ground and settle upon it. As the population grew, three tendencies became manifest. First, the most desirable lands all became occupied. Second, as these lands were more intensively cultivated, a tendency to diminishing returns appeared. Third, it then became necessary for new settlers to find employment by developing lands poorer in fertility or less desirable in location. The principles of economics teach us that as a result of this situation two margins of cultivation appear, where the returns in product, per unit of labor and instrumental capital applied to the land, are relatively low. There is an intensive margin, represented by the least profitable application of labor and instruments on the better lands, and an extensive margin, represented by the poorest lands which are cultivated. When this situation has developed, the owners of the better land are able to command a price for the use of their superior holdings. The tenant is willing to pay such a price, because by the use of the superior land he can produce more than is obtainable at the extensive margin of cultivation, where free land is to be had. The amount of the rent yielded by the better lands is roughly measured

by the surplus value of the product obtainable on them, as compared with the product at the two margins. This principle is embodied in the so-called Ricardian law, which is the accepted explanation of land rents. This law states that the rent yielded by a piece of land is equal to the value of the surplus product yielded by the labor and instrumental capital applied to that land over the yield of an equal amount of labor and instrumental capital applied at the intensive or extensive margins of cultivation.

Land Rent an Unearned Income.—The receipt of such a rent by landlords has been a most severely criticized feature of the present economic order. Its critics argue that land is not the product of anyone's labor or industry, and therefore should not be appropriated by any individual. It is a gift of nature which rightfully belongs to society at large, and not to any privileged landowning class. To permit any group of landowners to appropriate this natural heritage is particularly obnoxious, because land is the very basis of life itself, and everyone necessarily depends upon it. This fact puts the landowners in a position of advantage where they can exploit the rest of the community, deriving income from the mere ownership of natural capital without contributing anything in return.

Properly understood, this argument is substantially sound. If we apply to land rent our test of earnings, we will see that land rent is unearned by the landlord. Land performs a great service in production, to be sure, but the landowner, merely as an owner, does not. He is not responsible for the existence of the land. It would be there, with all its natural advantages, no matter what became of him. It would have been there if he had never been born. Nor is the value of the land the result of any action performed by him. Some lands naturally possess better qualities than others, and he who owns them can profit by those qualities. As population grows and the land becomes scarce it simply acquires a value which the landowner can take. This *unearned increment,* as it has been called, is conspicuous in the case of city building sites. As the population of a growing city increases, good locations suitable for business purposes in the central section become more and more valuable. The paving of streets, the construction of railroads, and other improvements made by the community likewise increase the values of land near to such centers, and these influences may extend for many miles out into the country. In time, the business possibilities of central urban sites become so great, due to the presence of large numbers of people in a small area, that the lands in such locations soar to fabulous prices. Values running into thousands of dollars per square foot are not at all unusual, and small lots in the hearts of our cities may be sold at figures running into millions of dollars. The owners of such sites can lease them for enormous yearly rentals which they cannot be said to have earned, for these values are created by the general growth of the community.

It is true that, in many cases, the owners of land have done a great

deal to improve it. Early settlers cleared, fenced, and drained it at the expense of much arduous toiling. Buildings have been erected upon it, and roadways constructed thru it. It should be clear from our argument that such owners are entitled to an income sufficient to pay the replacement cost of these improvements, with interest on the savings invested in them. They are further entitled to wages, at prevailing rates, for their labor (both mental and physical) devoted to such improvements. More than this they cannot fairly claim, for more than this cannot be earned by other capitalists or other laborers who are not so fortunate as to own any land. But such interest and such wages are not, strictly speaking, a part of land rent. Even without these improvements the land would still have value and would yield an income if rented to a tenant by its owner. Take a piece of land in the country or the city. Raze the buildings on it to the ground; destroy all its fences, ditches, roadways, and other man-made features; but leave it with such natural fertility as it possesses and in its present location with reference to community-built roads, railways, cities, and the like, and it would still command a rental value. That rent, the pure ground rent, is the share of income which is unearned by the owner.

Some people would object to this reasoning. They would argue that land rent is justified by the risks which are run by the landowner. They would say that if an individual has sufficient foresight to anticipate the growth of a community, and is willing to risk his judgment by acquiring a piece of land which he believes likely to improve in value, he is entitled to the reward that results from his cleverness. But we should not pay people for running risks, unless the bearing of such risks can be shown to contribute some useful service to the community. The profits of a cotton speculator can be justified because he performs the service of stabilizing prices and evening the consumption of cotton from month to month and from year to year, but no such service is rendered by merely owning land. Why should society reward the incurring of risks that have no useful result? We do not so justify the winnings of a gambler. The risks involved in land ownership do not suffice to place land rent in the category of earnings because they are not associated with social service.

The Social Function of Land Rent.—Altho the landowner, as such, performs no service to society, land rent, like any other price, does have a useful function. Unlike interest, it does not greatly stimulate an increase in the supply of the thing for which it is paid, for land is not a producible commodity. High rents do result in some clearing of forests, drainage of swamps, and irrigation of deserts, but the amount of land that can be reclaimed in such ways is small. This function of land rent, therefore, is insignificant.

It has another function of considerable importance. Just as interest serves to direct the investment of savings into their most valuable channels,

so land rent allots land to its most productive uses. Lands vary greatly in productive qualities according to their location, fertility, mineral deposits, and so on. Some are clearly better adapted for certain uses than others; but if we were to classify all the lands into such categories as city sites, residence sites, truck farming lands, staple crop lands, grazing lands, and so on, we would find that there is no hard and fast line between them. In each case there would be a margin of indifference, where lands would be almost equally adapted to two or more different purposes. So it is possible to withdraw some land from one use and turn it to another, if occasion demands it. The adjustment of the supply for each use is adapted to the demand thru the prices of commodities and the resulting effects upon land rents. Between any two alternative uses to which lands of a given type may be put there is a margin of transference where it is just a little more profitable to use it for the one purpose rather than the other. Thus, one might use land for growing potatoes instead of tomatoes, so long as it paid to do so. But if the land is suitable for both crops, according to the principle of opportunity costs, it cannot be employed for the one unless it will yield as high a rent as it would yield for the other. Hence, if the price of tomatoes rises, tomato growers can pay a little more for land to be used for that purpose, and this will raise the cost of it in growing potatoes, thereby forcing up the price of the latter and curtailing the sales. Some land will then be diverted from potato to tomato growing until a new equilibrium between the two crops has been reached. Thus, land rents, derived from the prices of the commodities to which the land is adapted, cause land to find its most productive employment, resulting in economy.

Is the Payment of Land Rent Necessary?—It has been contended that land rent cannot be abolished in any conceivable social order. There are bound to be differences in the quality of different lands, which means that some are sure to yield products of greater value than others. This surplus, which is the physical equivalent of money rent, must exist in the very nature of things. Moreover, if a price system is maintained in which prices are made to cover the costs of labor and savings on marginal land, such prices would more than cover the costs of labor and savings on better lands, because of the greater product obtainable, per unit of labor and savings, on the latter. Prices would then include a rent, paid by the purchaser and received by the landowner, whoever he might be. In answer to this argument, it might be said that the costs of labor and savings on all lands could be averaged and prices established accordingly; but it is not likely that such a system of prices would prove very satisfactory, for the reason that rent prices attached to land are needed to direct the land to its most productive employments. Any intelligent system of social accounting ought to attach prices to land based upon its value in its possible alternative uses; otherwise we would lack a suitable criterion for deciding how

much land to apply to this purpose or that. Here again, this function might be entrusted to an economic committee or council which used its judgment instead of prices as a guide. But if we were to maintain a price system, the most satisfactory means of doing so would probably be to include land rents as a part of it.

Alternative Systems of Land Policy.—Altho land rent may be considered an indispensable part of an intelligent price system, it is not necessary that this rent be paid to private owners. There are three possible policies with regard to land which a nation might pursue:

(1) It can leave the land in the hands of private owners, permitting them to receive the rents as they do now. We have already seen that this policy is undesirable because it puts into the hands of landowners an unearned income.

(2) Another possibility would be for the state to acquire all the land, either by purchase from its present owners or simply by confiscation. All lands would then become public property. This would be done under some forms of socialism; but public ownership of land need not involve the state operation of industry. The land could be leased to private individuals, who would carry on their industrial operations very much as they do today. These individuals, however, would be tenants, not landowners, and would pay a rent to the state for the use of the land. The rents so collected could be employed in ways beneficial to the public at large, such as the building of highways and the extension of public schools.

It can be objected to such a proposal that tenants do not usually make the best cultivators. Since they have no permanent interest in the land, they are likely to abuse it, sapping its fertility without replacement and not even providing against the wearing out of capital improvements. In fact, it has been argued that private ownership of land can be justified by the more rapid development and careful cultivation which takes place where the same individual is both cultivator and owner. Private ownership of land, however, gives no assurance that the owners will actually do the cultivating. Absentee ownership, leaving the actual use of the land in the hands of tenant farmers, is widespread in Europe and is increasing in the United States. On the other hand, it is possible that the evils of tenant farming can be obviated if the tenant is given some permanent interest in the real estate which he cultivates. If he were assured permanent possession of the land, together with actual ownership of all the improvements which he made thereon, satisfactory results might be obtained. This could be done without permitting him to appropriate the rent of the land itself. He would then have an incentive to cultivate efficiently, earning interest on all of his investment, while the surplus due to the bare land would be appropriated to the public use.

(3) A feasible method of carrying out this idea would be to permit

private individuals to own the land but to require them to pay part or all of the rent to the state in the form of an annual tax. A most interesting proposal along this line is the Single Tax program, which has been enthusiastically advocated by its adherents for several decades. In the next chapter we shall consider the advisability of incorporating this proposal, or a modification of it, into a general program for the reduction of inequality.

C. The Wages of Labor

The Nature of Wages.—The income of laborers consists mainly of wages. There are many kinds of labor, and a different wage rate is established for each of them. Labor is not a homogeneous commodity, capable of being shifted, like the mobile savings fund, into any employment where it is needed. On the contrary, it is divided by barriers of heredity, training, and other influences, into separate grades, known to economists as non-competing groups. Hence, unlike the interest on savings, which tends toward a uniform rate, there are sharp, permanent differences in the prices that prevail in the labor market. Each wage rate depends upon the conditions of demand and supply for the particular type of labor concerned.

According to the prevailing theory of distribution, the demand in each occupation is based upon the marginal contribution of the laborers to the value-product of the industry. This marginal product is small, and wages are therefore low, when there is a large supply of the given type of labor, relative to the capital or other labor with which it must be employed. Conversely, when the supply of labor is scarce, the marginal product is great, and the wage is therefore higher. The supply depends mainly upon the growth of population in each of the non-competing groups of society. This, in turn, is considerably affected by the standards of living prevailing in such groups. Where people are accustomed to high standards of living, the number of children per family is usually small, and there is a scarcity of numbers which makes for high wages among laborers of that grade. Where low standards of living prevail, as is usually the case among unskilled workers, large families are the rule, and wages are correspondingly low. Each stratum or grade of labor has a choice of many different occupations which people in that group are capable of filling. The supply of labor available for each occupation within the grade will depend upon the relative attractiveness or unattractiveness of the different trades. Those trades which offer special advantages will be able to get labor at lower prices than those which are particularly arduous, or dangerous, or possessed of other disutility.

As a result of these circumstances, we find considerable differences in wages (1) between the various non-competing groups or strata of society, and (2) between occupations within each group. In addition to these there

are also differences (3) between places which, being located at some distance apart, are not in the same labor market, and (4) between men and women in the same occupation. Inasmuch as these wage differences have a considerable bearing upon the problem of inequality, we must understand them and consider to what extent they are desirable and necessary.

Wage Differences Between Non-Competing Groups.—The most conspicuous differences in wages are those which result from the stratification of society into non-competing groups. We find a few gifted individuals, such as opera singers, champion prize fighters, motion picture stars, and other geniuses, whose services command enormous fees; professional men, such as lawyers, physicians, architects, and the like, who receive generous pay for their services; skilled workmen, such as mechanics, engravers, and electricians, whose wages suffice for a comfortable living; and unskilled workers such as ditch-diggers, cleaners, and general laborers, whose wages are quite low. So long as there are marked differences in the abilities of different classes in society, these differences in wages perform a useful economic function. In the preceding chapter we learned that the promotion of the greatest economy in production requires that those types of labor which are scarce, and whose productive qualities are important, should be employed only in those places where their labor is most indispensable. It would be a sheer waste of talent, for instance, to have a skilled wood carver employed at ordinary hammer and saw work which could be done by almost any carpenter. By attaching a higher wage to the more skilled type of labor this waste is prevented, for competition puts a pressure upon each enterprizer to keep his costs as low as possible. He finds it costly to employ highly paid labor, and he therefore makes it a principle never to employ a skilled or high-priced workman to perform anything which a less skilled and cheaper workman could do.

But this does not mean that the stratification of labor into different levels is a good thing. It is no doubt advantageous to have people of diverse interests and abilities, so that some are available to do each of the many kinds of work that production requires. It is unfortunate, however, that some types are so much more abundant than others that their wages must be deplorably low. Where the various economic classes are separated by artificial barriers, such as racial prejudice, lack of educational opportunities, and the like, society would be the gainer by the removal of such obstacles. For it is clearly to our advantage if we can take men who would otherwise be unskilled workmen of relatively little usefulness and make of them skilled artizans of much greater value in production. And where wage differences are the result of unequal natural abilities, we would increase the general prosperity of society if we could find means to reduce the percentage of births among people with poor heredity and increase the growth of population among the higher grades. Such measures would bring about an equaliza-

tion of wages automatically, without upsetting the existing economic order or resorting to crude proposals for tinkering with wages. So long as an unbalanced distribution of human abilities persists, corresponding wage differences cannot be eradicated, if the price system, with its resulting economy, is to be retained. In the next chapter we shall consider the possibility of reducing the differences between non-competing groups along the lines which have just been suggested.

Differences between Occupations within Each Group.—Within each of the various labor strata different rates of wages are paid in the various occupations open to the members of that grade, these differences depending on the relative advantages of the different trades. Thus, a painter of church steeples and other high buildings is paid more than painters of the ordinary sort; and common pick-and-shovel labor working in dangerous underground excavations, such as the so-called sand-hogs employed to dig tunnels under rivers, is paid much more than is received by the same grade of labor working above ground. To the extent that wage differences are really of the compensatory sort, they perform a useful economic function, for where labor has a choice of two or more occupations whose advantages differ, it will naturally go into the more attractive one. The higher wage paid for the work which possesses the greater disutility offsets this and serves as an inducement to secure supplies of labor for the unattractive jobs. There is thus a natural equilibrium which apportions labor according to the need for it in its various employments.

The perfect operation of this principle, however, is interfered with by a number of obstacles. Labor is often ignorant of its own opportunities, as well as lacking in foresight. Young men frequently enter a trade without calculating the advantages it offers in comparison with other occupations at which they might be employed. Parents do not always advise wisely, or they may selfishly encourage their children to enter some position which offers immediate prospect of greater earnings, when by a course of training or apprenticeship in some other line, offering more promise of advancement, they might do much better in the long run. Many young workers go into "blind alley" trades, such as driving delivery wagons or acting as messengers, which lead nowhere, when they might have been learning a skilled craft which would eventually provide them with a fairly good income. Sometimes the nature of an industry changes, or a new machine is introduced, which decreases the market for a certain type of labor. This was the result of the introduction of glass-blowing machinery into the glass industry. In such cases there is an oversupply of laborers who have long been employed in the industry and who cannot readily enter a new skilled occupation. While the wage differences which result from these things are not uneconomical, they are not performing their function entirely to our satisfaction; for altho low wages will prevail in the occupa-

tions which are overstocked and high wages in those where labor is lacking, the differences do not suffice to bring about the needed readjustment. Labor is not sufficiently mobile to shift from the poorly paid trades to the better paid ones. Hence, measures tending to increase the mobility of labor will help to bring about an equalization of wages and to apportion workers more economically among the various trades. An unjustifiable depression of wages in one line will thereby be corrected, along with excessively high wages in another. Trade unions, by their insistence upon standard wage rates, help to correct inequalities of wages paid to laborers of equal ability, at the same time putting pressure upon employers to organize their industries so efficiently that they can pay wages as high as those of laborers in other trades. Not all union policies are of this sort, however. We shall see that in some cases they actually create, rather than correct, unjustifiable wage differences.

Differences in Wages Between Places.—Where different wages for the same trade prevail between two different places, it is an evidence of a lack of economy in the distribution of labor. If labor in the building trades is scarce in Chicago while it is abundant in New York, the wages of plasterers, bricklayers, carpenters, and the like will be high in the former and low in the latter. In this case it is apparent that the utility of such labor would be greater if some of it were moved from New York to Chicago. When it was so moved, the wages would become substantially equal. Meanwhile the differences in wages prevailing between the two places tend to encourage such movement, and they therefore help to correct the maladjustment. To the extent that they do so, such wage differences perform a useful function. The fact is, however, that labor is lacking in mobility. In this respect it differs greatly from material commodities. If a high price for potatoes prevails in Chicago at the same time as a low price in New York, dealers in that vegetable will very quickly ship potatoes from the one place to the other, until substantial equality of prices in the two communities is established. Laborers, however, cannot readily give up their homes, and move themselves, their furniture, and their baggage away from their friends and associates into a new community. Hence the difference in wages is not effective in bringing about an economical adjustment. For this reason measures to promote greater mobility of labor, such as labor exchanges, are very desirable. At the same time, such measures will make for greater equality of earnings.

It is not clear, however, that this principle should be applied on an international scale. Where differences in wages prevail between different countries, it is true that the low-wage labor would be more valuable to the world if it was moved to the place of higher wages. On the other hand, the differences in race and culture between the world's various peoples are so great that difficult social problems are created when international mi-

gration takes place. The presence of immigrants from southeastern Europe and Asia in the United States has caused grave problems in this country. Also, it is doubtful whether such migration is the best way to meet the problem of low wages in the countries from which the immigrants come. Low wages in such countries are usually the result of poor industrial efficiency and overpopulation. The exodus of large numbers of people will not correct either of these defects. The ranks of the departing are quickly filled by the high birth rate prevailing among those who are left behind. Meanwhile, the migrants increase the population and depress the wage level in the countries to which they go. A better cure for low wages in countries backward industrially lies in the adoption of progressive measures for economic reconstruction and for the reduction of an excessive birth rate. Attempts to adjust world wage levels to equality thru international migration, therefore, are not advisable.

Differences in Wages Between the Sexes.—It has often been observed that women are usually paid less than men, even in the occupations where both are employed at identical work. To some extent this inequality is based upon a real difference in the efficiency of the two sexes. Women are likely to lose a good deal of time on account of sickness, and they frequently prove to be but temporary employees, because they are likely to marry and leave their employment after a time. Men are more satisfactory to their employers because of their greater steadiness and permanence. Where the wage difference rests on this basis it accords with sound principles of economy, for if men are more valuable, a higher price should be attached to their services in order that they may be reserved for the most important work, leaving women to be employed where their handicaps are of less serious consequence.

On the other hand, not all wage differences between the sexes are to be attributed to this cause. We have not yet entirely recovered from the traditional belief that women are destined by nature to certain types of work deemed peculiarly adapted to them and that the more skilled and remunerative employments should be reserved to men. This creates a prejudice against the entrance of women into certain of the professions and trades which is difficult to overcome. As a result, there is an overcrowding of women into such occupations as domestic service, teaching, department store selling, stenography, and certain types of factory employment, which depresses their wages in such trades. Where the difference in wages rests on such a basis it is indicative of an uneconomical situation. It would be advantageous to break down such barriers of prejudice and custom in order that women might be admitted freely into the occupations where their labor would be more valuable. The familiar slogan "Equal pay for equal work" has a perfectly sound economic basis, but it can only be applied properly where the two sexes can really do work of equal quality.

Earned and Unearned Elements of Wages.—In most discussions of earned and unearned income it is taken for granted that wages are earned. Socialists class wages as service incomes, in contrast to the property incomes, which they regard as unearned. It is true that labor performs a productive service. It therefore meets the first test of earnings; and where the wage is established in a competitive market it meets the second test. Sometimes the wage is less than freely competitive conditions would bring about. This is the case in the sweated trades, where unscrupulous employers are able to exploit the ignorant immigrants crowded into our cities, when the latter might find more remunerative employment elsewhere if they were not handicapped by barriers of language and lack of knowledge of American conditions and possibilities. On the other hand, there are cases where wages exceed the rates which would be established in a freely competitive market. This is true where trade unions have secured a monopoly in their trade, and by strictly limiting the number of apprentices that can be taken into the industry, or by making it difficult to secure membership in the union, they have succeeded in creating a scarcity of labor. The excess wages in such cases are just as clearly unearned as the profits of any trust or big business monopoly. Again, an occasional shortage of labor in a given occupation, resulting from a sudden increase in demand or decrease in the supply, may boost wages for a time to a point far above the long-time normal level. One might also mention the exorbitant salaries of a few business executives; but these are really a concealed form of business profits, rather than wages. There are also the huge fees of certain geniuses—motion picture stars, singers, and the like, whose talents are so exceptional that they almost constitute personal monopolies. In general, however, there is little occasion to complain of excessive wages. The laboring class as a group is paid but moderately, and often poorly. A general raising of the level of wages is essential to the correction of inequality and the promotion of national prosperity.

D. The Profits of Business Enterprize

Gross Profits and Pure Profits.—We must now turn to the fourth (and last) share of income—the profits of business enterprizers. Their share of the product of industry is composite, because they contribute more than one factor to production. Most enterprizers have capital of their own invested in their businesses. They also act in the capacity of labor, performing the functions of supervizion or management. Quite reasonably, they expect to receive from their business a return at least equal to the interest they might obtain from their capital by investing it in the loan market, plus whatever wages they could earn as employees for some other person. If there was not a fair prospect of such revenue, they would

not enter into business for themselves. Hence, business may be expected normally to yield a profit equivalent to these two items. But, as enterprizers, they hope for more than this. It is the possibility of obtaining a surplus which induces them to undertake the responsibilities of maintaining businesses of their own. On the other hand, the uncertainties of their position are such that they may suffer an actual loss. The total profits of a business in any one year, therefore, may be either large or small.

These total earnings, representing the excess of the enterprizer's receipts over his outlays for wages, materials, interest on borrowed capital, insurance, taxes, and the like, are usually known as gross profits. Gross profits are composed of three elements, corresponding to the above analysis. They are: interest on enterprizer's capital, wages of management, and pure profits. The interest may include a rent derived from land owned by the enterprizer. Pure profits represent the difference between gross profits and the sum of interest on enterprizer's capital plus wages of management. Such interest (including land rent) and wages do not differ essentially from the ordinary returns accorded to capital and labor in the loan and wage markets. What we have said about them in the first three sections of this chapter will apply equally to them here. Pure profits are a different sort of revenue, which may now be discussed.

Pure Profits as a Reward and Inducement for Risk-bearing.—Some writers believe that pure profits may be justified as a reward for the risks of business men. The enterprizer is of necessity a speculator. Assuming the responsibility for the conduct of a business in an economic order where production is in anticipation of demand, he must hire his laborers and pay them in advance, and he must borrow capital on which he guarantees to pay fixed interest payments at regular intervals. These costs are incurred in advance of sales. There is a chance that production will be interfered with by strikes or other contingencies, or that, if completed, there will be no market for the product, or that the price obtainable will be too low to cover the costs. It is said that we cannot expect the individual to incur such risks without recompense, and hence, that he is entitled to some surplus above interest and wages of management. It is further argued that the recompense is not excessive, for many believe that if all the losses incurred by business men were balanced against the gains, the average surplus would be found quite small. There might even be a net deficit.

It is true that enterprizers incur risks, and that in doing so they often render service to the community. Certainly the consumer is benefited by having commodities produced for him in advance and offered in great variety for his use, to be purchased if he likes, or refused if they do not appeal to his fancy. According to the idea of just compensation which we have accepted, such risk-bearing ought to be paid for at a fair rate of remuneration, as established by competitive bargaining. But the present

random allocation of profits to business men can hardly be justified on such a basis. There is no established rate of remuneration for the risks of business men. There is just a mad scramble in an ever-changing, dynamic world, which results in the most extraordinary fluctuations of loss and gain. There is no relation between the losses of any one individual and his gains. He may have a deficit one year to be followed by a surplus the next, but there is no assurance that any constant or reasonable average will be maintained. He may lose out completely and be forced into bankruptcy, while another may be successful thruout his career. Surely the high gains of one are not to be justified as compensation for the losses of another. Yet this is just what is implied when it is argued that profits are earned because the average rate of return is not excessive, and no more than compensates for the risk of loss. No doubt there is sometimes a relation between the profits of the individual and his efficiency. Good judgment, knowledge of the market, and careful organization may be responsible for success, while incompetence and carelessness may often lead to failure. Yet we have no assurance that such is usually the case. On the contrary, there is every evidence that profits depend to a large degree upon mere chance or luck. Prices may go up, causing nearly everyone to gain, or they may go down, bringing general losses. The demands for products fluctuate unexpectedly, new inventions upset the market, and many other things may happen to cause profits to rise or fall. Hence, there is no definite correspondence between the risks born by any individual and his profits. He may bear risks for years and never be rewarded, while another whose risks are less may be rewarded much more fully. There is very little justice in such a chaotic arrangement.

A much stronger argument is that profits can be justified as a *necessary inducement* to risk-bearing. This does not attempt to defend them on the ethical principle that profits are a fair reward for risk assumed. It merely asserts that the payment of profits is expedient, because without them business men would not assume the risks of production. Hence some inducement in the way of special payment conduces to the social welfare. In a competitive system of free enterprize, the payment of some reward for risk-bearing is probably necessary. It is not likely that production in anticipation of demand, with enterprizers assuming the responsibility, could take place without it; but some question may be raised as to the amount of reward that must be paid for this purpose, and the nature of the payment. It is doubtful whether the excessive gains now obtained by some enterprizers are really required to maintain the system. The prospect of some pure profit in addition to interest and wages is a reasonable price for consumers to pay for the services of business men, but need this reward run into millions? However this may be, the payment of such rewards will become less necessary as progress is made in the stabilization of business. If we can improve the process of marketing and

the efficiency of business organization by such measures as are advocated in Chapters IV and XI, and reduce the fluctuations of the business cycle, as suggested in Chapter XIV, the risks assumed by enterprizers will be very much reduced. The payment of excessive profits will then no longer be necessary, altho a moderate profit will probably always be needed so long as the system of capitalism prevails.

Pure Profits as an Incentive to Efficiency.—Somewhat similar to the defense of profits as an inducement for risk-bearing is the contention that they are justified as a stimulus to efficiency. In the preceding chapter our attention was called to the part played by the prospect of riches as an incentive to industrial achievement. Profits from the successful conduct of business are one of the principal sources of such riches. There is no limit to the gains that can be made by a clever business man if he is reasonably fortunate. This possibility undoubtedly spurs many persons to energetic activities which they might not undertake for a less strong inducement. We cannot know how great a part the lure of profits plays in furnishing the driving power for industry; but, great as it may be, there are serious defects in its operation.

In the first place, there is no necessary correlation between the amount of service rendered and the amount of profits received. Unless wages of management itself be taken as the measure of an enterprizer's contribution to production, there is no competitive price established as a standard. Hence, we can hardly believe that the amount of his gains is any sure criterion of the amount of his service. One may be much more efficient than another in the conduct of his business; his gains may be greater than that of his competitor by a million-fold. Are we then ready to state that his efficiency was a million times as great? If we accept this, then we must give up any attempt to reduce the inequality of incomes in society, for we would be forced to recognize the greatest extremes of inequality as expedient and proper. There are times, too, when the man who reaps the gain is not the one who really contributed to the achievement. The profits may go to stockholders, while the actual success of the corporation is due to the careful management of salaried engineers and executives. Everyone is familiar with the fact that inventors whose genius has contributed contrivances of remarkable value to mankind have often been exploited by financiers who bought their inventions for a song and then made millions from their manufacture.

This leads to the thought that in many cases profits result from business activity which contributes no service to the community at all. This is usually the case with those profits which result from chance. It is particularly true of those profits which result from sharp practices, such as the predatory manipulations of financial swindlers or the foisting of worthless products upon the consuming public. Many shrewd deals and corporate

reorganizations which are legal and apparently respectable are nevertheless essentially rascally in their intentions and effects. Products may be adulterated and made to look like what they are not, or worthless and even poisonous nostrums may be widely sold thru mendacious advertizing. Finally, profits are often the fruits of monopoly. Here the gain results not from production, but from the curtailment of production, for it is only by limiting the supply of its product that the monopoly can exact a high price from consumers.

These considerations give pause to him who would approve of profits as the incentive to efficiency. Granted that they frequently spur business men to achievement, it must be admitted that too often they bear no relation to efficient service performed for society. The same must be said of the high salaries sometimes paid business executives. They are rather a concealed form of profits than ordinary wages.

Earned and Unearned Elements of Business Profits.—We may, then, conclude that there are both earned and unearned elements in business profits. The interest on enterprizers' capital, when derived from savings, is justified as earned by the argument of section A of this chapter. In so far as it consists of land rent it is unearned. True wages of management are justified by the argument of Section C; but exorbitant salaries, arbitrarily determined, consist partly of pure profits. Pure profits are earned only when they constitute reasonable payment for efficient service rendered in production. Where they are the result of chance, predatory business operations, such as financial manipulation, adulteration of products, the production of worthless commodities, or monopoly, they are unearned. Negative pure profits, or losses, may likewise be said to be earned, or deserved, where they are clearly the result of inefficiency, but are undeserved when they are caused by mere misfortune or chance. Wise social policy should seek to curtail both unearned profits and losses so far as possible.

Summary

This chapter has been devoted to an economic and ethical analysis of the four major shares of income. We have tried to see to what extent these incomes perform useful economic functions, and to what extent they are earned, according to the tests developed in the preceding chapter.

Interest on savings is earned, because (1) it is paid to capitalists for rendering the service of providing a fund of instrumental capital, without which the productive roundabout process could not be carried on, and (2) it is paid for at a low rate, established in the competitive loan market. Such interest performs the useful economic functions of regulating the proportion between provision for present and future income, and of directing the investment of capital into its most important channels. Altho interest

might be abolished, it would be a useful part of any price system, even under socialism. Radical attacks on interest confuse it with the problem of large fortunes, an essentially separate issue.

The rent of bare land, exclusive of improvements, is an unearned surplus arising from the scarcity of desirable land and its consequent value in production. The landowner, as such, makes no contribution. Land rent performs the function of apportioning the various kinds of land to their most productive uses. Altho this could be done in some other way, it is most readily accomplished thru rent prices attached to land as part of a general price system. This rent, however, need not be paid to private landowners; at least a part of it can be appropriated to the public use.

The wages paid to labor differ greatly between non-competing groups, between occupations within a group, between places, and between the sexes. In so far as such differences cause labor to be withdrawn from places or occupations where it has little utility to those where it has greater utility they promote economy. All four types of wage differences have this tendency, but it is seriously interfered with by the immobility of labor, thus causing wage differences to persist which would otherwise be removed by the redistribution of labor. Hence, measures for promoting the increase of high-grade and decrease of low-grade labor, the migration of labor from occupation to occupation within a group, and between places within a country (but not between countries of different races and customs), and also those tending to reduce the prejudice against the employment of women in certain trades, are desirable. Most wages are earned, but those resulting from trade union monopoly, individual monopolies, or artificial scarcity, are not.

Of the three elements of gross profits, interest on enterprizers' capital, where derived from savings but not from land, is earned. Wages of management are likewise earned. Pure profits are earned only where they constitute a reasonable payment for efficient service. Excessive pure profits cannot be justified as a reward for risk-bearing, for there is no correlation between an individual's risks and his gains. Some profits are justified as an inducement to risk-bearing, but this will become of less importance as business stabilization progresses. Some pure profit can be defended as a necessary inducement to efficient production, but the argument is weakened by the fact that many profits are made without service being rendered to the community. Such profits should be prevented if possible.

SUGGESTIONS FOR FURTHER READING

Much material for this chapter has been suggested by the able and interesting analysis of income shares contained in H. D. Henderson's *Supply and Demand* (1922), Chaps. VI to IX, inclusive. Professor T. N. Carver, in his *Essays in Social Justice* (1915), especially Chapters VI, VII, VIII, XI, and XIII, also offers

a thoughtful criticism of these incomes, presented in his usual stimulating style. F. M. Taylor, in his *Principles of Economics* (1921), Chaps. XLII to XLV, endeavors to defend the existing system of distribution. He appears to approve of it almost entirely. On the other hand, R. H. Tawney, in *The Acquisitive Society* (1920), especially Chaps. I to V, takes a searchingly critical, but constructive, attitude. An analysis of earned and unearned incomes, especially rent, is contained in Part II of H. G. Brown's *Economic Science and the Common Welfare* (6th Ed., Rev., 1936). For a strong presentation of the view that profits are derived from predatory rather than serviceable activity, one can hardly improve upon T. Veblen's *The Theory of Business Enterprize* (1904).

CHAPTER XXII

THE REDUCTION OF INEQUALITY

A. The Causes of Inequality

A Scientific Approach to the Problem.—In Chapter XX we surveyed the facts showing how unequally the income of the United States is distributed, and we learned why this inequality is undesirable. In Chapter XXI we examined the four shares of distribution in some detail to ascertain how far they could be justified and to what extent modification of them seems desirable. With these discussions as a background, we are in a position to work out a program for the reduction of inequality. It would be futile merely to divide the income of the country equally among the people, regardless of their ability or productivity, or of other economic considerations. Vilfredo Pareto explains that "After a short time the inequalities, which had been destroyed, would reappear. Equality could only be maintained by periodic redistributions at short intervals."[1] But this does not mean that there is no remedy for unequal distribution. "Such statements amount to no more than saying that, if the present fact of inequality is suddenly removed, while the causes which have produced it in the past are left in operation, the fact of inequality will reappear in the future. It is equally true to say that, if we bail out a leaky boat, it will continue to let in water. But this throws no light either on the causes of the leak or on the practical possibility of repairing it."[2] Professor Carver goes so far as to say that "We can have any degree of equality we want and in the strictest harmony with economic laws *if* we are willing to pay the price and to pursue a constructive program in harmony with economic laws. Economic laws are not opposed to equality. They do, however, interfere with certain ideas of equality. Gravitation does not prevent aviation; it does, however, make certain systems of aviation impossible, as Darius Green found to his sorrow. Economic laws interfere only with the plans of the Darius Greens of social reform."[3]

A sound program must attack the causes of inequality. If we can remove or modify them without interfering seriously with production, and

[1] Cited in H. Dalton, *Some Aspects of the Inequality of Incomes* (1920), p. 241.
[2] H. Dalton, *ibid.*
[3] T. N. Carver, *Essays in Social Justice* (1913), p. 266.

without bringing on other economic disaster, we should do so. Some of the causes are specific and immediately apparent; others are more general and remote. The former are more easily controlled but their elimination is less likely to meet the problem. The latter are more difficult to get at, but their removal is all the more important because they are fundamental. It is not likely that society in the near future will be able to solve the problem of inequality completely. It may be necessary, therefore, to resort to makeshift measures which treat the symptoms rather than the disease, relieving the more acute suffering which is caused by unequal distribution without eradicating it. Before committing ourselves to a program, however, let us undertake an analysis of the causes, beginning with those which are more fundamental and remote.

Differences in Heredity.—An obvious source of the inequality of incomes lies in the different abilities of human beings. These differences are inborn to a large extent. It is not true that all men are created equal. Some are larger, stronger, more vigorous and powerful in physique than their fellows. Some are gifted with one talent, such as musical or artistic ability, while others show aptitude in another field, such as the sciences or mechanical arts. Psychologists have recently demonstrated that various grades of intelligence are exhibited by our people. Intelligence tests applied to nearly two million men drafted for service in the World War showed marked differences in the mental levels of the soldiers examined.

Such differences as these are largely hereditary. While it is not denied that differences in human ability can be considerably modified by the influence of the environment, nature has endowed each person at birth with different capacities, and these capacities set limits of achievement beyond which one cannot hope to go. It is native intelligence, and not the development of mind resulting from education and experience, which the above-mentioned tests are designed to show. It is natural that such differences should lead to inequalities of income. We should expect the more gifted members of society to be more successful than their less well equipped fellows. The born genius is pretty sure to rise to a position of affluence, while the person of inferior capacity will usually be living in a state of comparative poverty.

Differences in Environment.—Not all the inequality which prevails in modern society, however, can be explained in this way. People are not only unequally endowed at birth, but they are offered unequal advantages by the environment in which they are placed. Altho America may justly be considered a land of opportunity, these opportunities are by no means equal for everyone. Some are born in well-to-do families, which enables them to get an especially favorable start in life. The superior home influence gives them a better training, and they are more likely to obtain a good education.

When ready to make their own living, relatives or friends secure them a desirable appointment. In addition to all this, they may inherit wealth, which assures them a large income or the capital necessary to launch them into businesses of their own. Those who are so unfortunate as to be born in poorer families are much less likely to enjoy the advantages of an uplifting home influence. Their health may be impaired by improper food or unsanitary conditions of living. They have less chance to obtain a good schooling. There are no friends to place them in executive positions, and there is no inheritance to provide them with capital. It is no wonder that such inequalities of opportunity lead to great inequalities of income.

In addition to these influences, which arise out of wealth and poverty, there are the forces of chance, which are very whimsical in bestowing their favors. The lucky discovery of oil on one's farm, a new development in science, an unexpected increase in the demand for one's product, even some sudden disaster to one's competitor—any of these may be the source of a fortune. Or, the death of a parent, the accidental injury of one's body, an earthquake or flood, the devastation of war, or an unexpected turn in prices, may be the cause of poverty.

The Sources of Great Fortunes.—So long as we speak in such general terms as these, it will be difficult to point the way to a reduction of inequality; for who can hope to give a single formula which will establish an equally good heredity and an equally favorable environment for everyone? But these general causes operate in specific ways. Hence, there are specific sources of riches and poverty, which, being more tangible, are easier to control. A survey of the manner in which our millionaires have obtained their wealth will give us a view of some of these. Most of us are already familiar in a general way with how such fortunes are made.

Very seldom do they arise from wages. No doubt the large salaries occasionally paid in industry have been responsible for some moderate fortunes, but one cannot accumulate millions from such a source. There are some conspicuously wealthy persons whose incomes have been derived from purely personal services. A number of motion-picture stars are reputed to have amassed millions thru their acting, and it is well known that a world's heavyweight prize-fighting champion is paid tens of thousands of dollars or more for a single encounter. But these winnings are more truly to be regarded as profits than as wages, and they frequently take the form of royalties on sales, or a percentage of the gate receipts. Interest, also, is never the source of a fortune, for interest payments of any considerable size can only be derived from a fortune that is already large. If riches are not acquired from wages or interest, they must be derived from land rents or business profits. This is, in fact, usually the case.

Not a few fortunes have been made from rising land values, thru speculation in real estate. The growth of land values in New York has

been responsible for creating or increasing a great many fortunes, and nearly every large city has its rich citizens whose money has been made in a similar way. The period of wild speculation in Florida lands from 1923 to 1925 made fortunes for many, altho much money was lost in the subsequent collapse of that boom.

Great fortunes have also been made in the exploitation of such natural resources as coal, oil, copper, lumber, and the like. When these have been acquired in the early stages of development, they have subsequently proved to be worth enormous sums. We have our coal barons, our copper kings, and our oil magnates, whose unofficial titles reveal the source of their riches.

Perhaps most great fortunes originated in the form of business profits. These cannot always be separated from land rents, especially where the money has been made in some industry devoted to exploitation of a natural resource, such as those just mentioned. Occasionally, enormous earnings result from the sheer efficiency of some productive enterprize. Very often, however, excessive profits result from the enjoyment of monopoly power. The monopoly may be in the form of a patent on some extraordinarily useful commodity, or it may arise thru the control of natural resources, or by the mere combination of a few large plants into a single enterprize. Others have acquired riches thru various financial manipulations and speculative deals. Still other profits have come from chance. The sudden discovery of oil has made millionaires in some cases of Indians who are too ignorant even to administer their own wealth.

Our earlier discussion of earned and unearned income showed that it is principally profits and land rents which contain unearned elements. We now see that it is from just these sources, in the main, that most of our large fortunes are derived. We are justified in the conclusion, therefore, that these fortunes are usually—tho not always—at least partly unearned. This does not mean that our very rich men are to be morally censured for the possession of their unearned wealth. In some cases, it is true, they achieved their success by unscrupulous methods and predatory practices which are justly to be condemned; but for the most part they simply adapted themselves skillfully to the economic system in which they lived, and profited thereby. Rather than attack them as individuals, therefore, we should set about correcting the features of the system which make unearned gains possible. From our analysis it appears that if we can do this, we will at the same time go far to prevent the amassing of excessively large fortunes.

The Rôle of Property Institutions in Inequality.—The institutions associated with private ownership of property in capitalistic society play a great part in the building up of large fortunes. Prior to the Industrial Revolution exchange was little developed. Money was little used, and there

was not nearly so much instrumental capital employed in industry as there is today. Under these conditions one could amass wealth only by acquiring land or laying up hoards of consumers' capital. The only rich capitalists were landed aristocrats who obtained their property by grants from the crown or by inheritance, rather than by accumulation. The institutions of modern industry have changed all this. Now a vast amount of instrumental capital is employed in production, from the ownership of which an income can be derived. Most of this capital is held under the corporate form of business organization and can be conveyed from person to person by the simple process of selling bonds or shares of stock. These securities constitute a kind of intangible property which can very easily be held without the owner's participating directly in the management of the real capital which they represent. They also make possible speculative deals and manipulations of various sorts which could not have been carried on under the old régime. This permits many kinds of financial transactions in which a profit can be made, and it also allows of enormous concentration in the hands of a single individual. On the other hand, the division of the stock of the corporation into numerous shares permits a large aggregation of capital to be owned by a great many different people. The corporate form is not incompatible with a wide diffusion of property ownership. In fact, there has been manifest in recent years a tendency for the ownership in some corporations to be scattered among an almost incredible number of stockholders, sometimes running into hundreds of thousands.

Nevertheless the facts are that the ownership of property is largely concentrated in a few hands. Various studies have been made of this, based on records of the probate courts, which show the value of decedents' estates, or on other data. All indicate that there is more concentration in the ownership of property than there is in the distribution of income itself. This means that incomes from property go mainly into the pockets of a few rich people. No doubt this is one reason for the improper classification of property incomes as unearned which was commented on in the preceding chapter.

The Inheritance of Wealth.—A characteristic of the property institution which is particularly important for our problem is the transmission of wealth from generation to generation by inheritance. The accepted practice in modern society is to allow the owner of property to pass it on to the members of his family or to others, without very much restriction. So it happens that a fortune once made by an individual can be enjoyed thenceforth, not only by himself, but also by his heirs. Such inheritance cannot be said to cause inequality, for the wealth has already been accumulated before it is inherited, but it does perpetuate it. And it perpetuates it in a form particularly obnoxious to many thinkers, be-

cause it gives to the descendants of the rich an advantage which they have in no way earned. No matter how much the original creator of a fortune may have worked to secure it, and even tho he may have earned every dollar in productive service to the community, his descendants can hardly be said to have any just claim upon it, having had no part in the getting. They receive it merely because they happen to have been born into a family of wealth. An accident of birth hardly justifies them in having such wealth. This practice of passing on wealth to one's beneficiaries makes possible the maintenance of a leisure class, whose members can live in idleness and luxury without contributing any productive service.

This reasoning appears shocking to many persons who have so long been accustomed to the inheritance of wealth that they accept it as part of the plan of life. To them inheritance is a "natural and inalienable" right which man should not interfere with. The doctrine of natural and inalienable rights, however, has long been discarded by well-informed persons. If by natural rights is meant those which exist in a state of nature, it may be replied that there never were any such rights. In nature everything belongs to him who can take and hold it against his enemies. Only when society established courts and a police force to maintain the security of property could the right of a man to bequeath his fortune to his heirs be established. Philosophers and courts agree that the institution of inheritance is a privilege conferred upon property-owners by society. Such being the case, society may and should restrict or abolish this privilege if it is in the social interest to do so. There are no rights which men enjoy that are inalienable, in the sense that society cannot curtail them or take them away in the interests of the general welfare. We believe in the value of liberty, yet we do not hesitate to imprison those who cannot exercize the privilege of liberty without injury to their fellows. We even take away the life of those who have committed murder or other heinous offenses. Inheritance, therefore, must be scrutinized in the light of its effects upon the social welfare, and we may modify it if we find it expedient to do so in order to establish greater equality of incomes. We will consider the advisability of this in the latter part of this chapter.

Low Wages as a Cause of Low Income.—As profits and land rents are the source of most very great riches, so wages are the source of low incomes. The poor are poor partly because their income consists mostly of wages, and the wages of most people are small. We have already learned that the lowness of wages is due to the abundance of certain types of labor, relative to the demand for them, which is largely the result of the stratification of society into non-competing groups, with attendant overcrowding in the lower strata. We shall presently consider what steps may be taken to remedy or alleviate this condition.

B. The Reduction of Large Fortunes

Checking the Unearned Incomes.—Having analyzed the causes of inequality, we can proceed to consider what may be done to reduce it by removing or modifying those causes. We have investigated the specific sources from which large incomes are made and those from which low incomes result. Let us attack the problem from two corresponding angles, endeavoring to find means (1) to reduce excessively large incomes, and (2) to raise the lowest incomes.

In seeking to place obstacles in the way of obtaining great riches we must not be unmindful of the danger, to which we have referred, of discouraging productive effort. We should allow generous recompense to those who contribute service of great value to the community. Our analysis indicates, however, that many, if not most, large fortunes are partly unearned, and therefore derived in unproductive ways. Hence, if we can devize means of preventing the undesirable kinds of business activity we will greatly check the making of great fortunes without denying adequate rewards for productive achievement. This will not prevent some people from obtaining large incomes by useful work, but these gains will seldom reach the enormous figures of our present millionaires, and so long as they are earned we need not be greatly concerned about them. It is the reduction and not the complete elimination of inequality that we are seeking.

The Single Tax Proposal.—A good point at which to begin such a program is with the rents derived from land. We have found this to be one source of unearned great fortunes. It was suggested in the last chapter that a convenient way to prevent the private appropriation of such rents is thru taxation. The most widely discussed proposal to accomplish this is that known as Single Tax.

In the latter part of the nineteenth century Henry George, a writer of ability, was struck with the peculiar paradox that, in spite of the tremendous increase in production and wealth which had resulted from the advancement of civilization, poverty remained. He was also impressed with the rapid growth in land values and the resultant speculation which prevailed at that time. As a result of study and reading in the field of economics he came to the conclusion that in these rising land values lay the explanation of the paradox. Land rents were absorbing the increase in production, and labor was not getting the benefit of it. From this reasoning he worked out a proposed remedy which he published in his famous book, *Progress and Poverty,* in 1879.

George took as his starting point the Ricardian law of land rent with which we are already familiar. He was especially concerned with the extensive margin where no-rent land is found. Here, on the poorest land

in use, the entire product is shared between the labor and artificial capital employed. If any piece of land, because of its superior fertility or advantageous location, yields more than this, that surplus goes, not to the laborers who performed the work nor to the capitalists who provided the tools, but into the pockets of the proprietor who owns the land. Such being the case, he inquired what would be the effects of a growing population upon the relative prosperity of the different classes in the community. He reasoned that such growth in time would cause the most fertile and accessible land to be occupied, forcing newcomers to settle upon inferior plots. Cities would spring up in the settled districts and become crowded, causing a scarcity of land satisfactory for building purposes in the centers of trade. The pressure of increasing population would bring into operation the principle of diminishing returns, causing the product obtained at the margin of cultivation to become smaller and smaller. This, he believed, would keep wages down to a subsistence level and interest at a minimum. New inventions and progress in the arts of production might make the total product of industry greater than ever before, but the growth in the number of people, by pushing the margin of cultivation ever downward, would prevent this increase from bringing about a rise in wages or interest. The entire gain, therefore, would be absorbed by the rising rents of the better lands, and serve only to enrich the proprietors.

By a line of argument similar to our previous analysis, he concluded that these rents were unearned by the landowners, who therefore constituted a sort of plutocratic aristocracy, fattening at the expense of the rest of society. How was it to be prevented? Having found so simple a cause for poverty, he had no difficulty in supplying an equally simple remedy. Take away the rent of land from its present owners and give it to the community—that is his proposition in brief. It is proposed to accomplish this by means of a tax upon the full annual rental value of the land. This value, created by the community and attached to the natural resources, not being the product of any individual, belongs rightfully to the community. Single Taxers believe this should be appropriated for the common good. Whatever the use of the land is worth per year should be paid to the state as an annual tax. They believe that the income from this source would be sufficient for all the expenses of government. All other taxes could and should be abolished. The tax on land would be a *single* tax, from which all public revenues would be derived.

It is not proposed that any tax would be paid for improvements on land. The owner could erect a building on which he could earn interest. This interest he would not have to pay to the state. If he owned a mine, he would not have to pay a tax on the shaft, tunnels, breaker, power plant, or other property which he had caused to be erected there. What the

state would take would be the rental value of the bare land itself, as a natural resource. Thus, only the unearned increment would be touched.

This measure, the Single Taxers believe, would solve the problem of inequality and eliminate poverty. They believe that the private ownership of land is the only source of unearned income. Since the state would take this away from its present recipients, the original source of exploitation would be permanently removed. The rest of the community would benefit in three ways. In the first place, they would be relieved of all other taxation. When it is considered that the taxes in this country take about one dollar out of every seven or eight from the pockets of our citizens, it will be realized that this is no small item. Secondly, Single Taxers believe that the amount of income derived from the tax would be more than enough to meet the ordinary expenses of the state. The surplus could be expended for the collective welfare, in such projects as increased educational facilities, more parks and playgrounds, better roads, promotion of the public health, cleaning up the slums, and so on. Every increase in governmental service of this sort is an increase in the real incomes of the masses. Finally, it is claimed that the Single Tax would increase the total income of the community by encouraging production. Many present taxes are believed to be somewhat of a burden to productive industry. Under the proposed plan these taxes would be removed and a tax placed upon the unearned increment of land, which, being a pure surplus, would burden no one. It is alleged that it would do more than this. No one could hold land idle for speculative purposes, because as fast as its rental value increased the tax would be raised correspondingly. No one could afford to use land in any except the most productive way, because whatever the land is worth in the market where tenants are competing for the privilege of using it will determine the amount of the tax which the owner must pay. This will put pressure upon him to put the land to a use which will make it yield the tax. In these ways Single Taxers believe that their plan would increase production, thereby raising the income of the people.

This unique proposal, at once so simple and sweeping, is advocated as a panacea to remove at one stroke all the inequities of distribution. It has been hailed with enthusiasm by many converts who are carrying on an active propaganda for its adoption.

Some Objections to Single Tax.—While some of the suggestions contained in the proposal are not without merit, the plan, taken as a whole, is open to a number of objections. In the first place, it greatly exaggerates the importance of land rents in the distribution of income when it assumes that these rents absorb most of the fruits of economic progress. A careful study of the apportionment of income in the United States among the four factors of production indicates that less than 10 per cent of it goes

to the owners of land.[4] The confiscation of this relatively small share and its appropriation to the public use could not accomplish the sweeping reform which the Single Taxers expect of it. It would not even suffice to defray the present expenses of government, so that it would have to be supplemented by other taxes. Furthermore a survey of the changes which took place in the four shares of income in the United States from 1850 to 1910[5] does not bear out the Single Taxers' contention that land rents have grown steadily larger while wages and interest remained the same. The truth is that, during this period, at least, the share of land rent remained remarkably steady, fluctuating around 8 or 9 per cent, while wages and profits absorbed most of the increase in income made possible by productive progress. There is a flaw in the logic of Henry George's argument that land rents must always absorb the increase in production. The situation which he believed to prevail is shown in Figure 11. Here the total

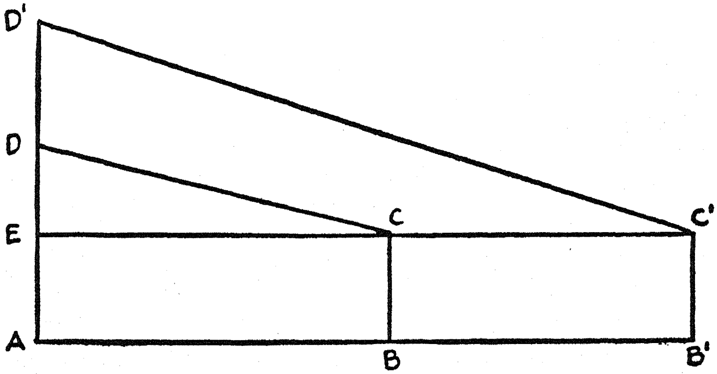

FIGURE 11. The Effect of Progress on Distribution According to Single Tax Theory.

product derived from all the lands in use at an early stage of our history is represented by the area ABCD. BC indicates the amount produced at the margin of cultivation, which sets the rates of wages and interest for the whole of industry. The share of these two agents is therefore represented by the rectangle ABCE. The product on the best lands is shown by the line AD, the diagonal DC indicating the declining productivity of poorer soils as we approach the margin of cultivation. Since all the surplus above the product at the margin goes to landowners, the area DEC represents the total land rents paid. The larger area AB′C′D′ shows the results of increasing production brought about by science and invention as Henry George conceived them. He believed that the increase in labor and savings would force poorer lands into use, keeping the share of wages and interest

[4] W. I. King, *The Wealth and Income of the People of the United States* (1915), Chap. VII.
[5] *Ibid.*

at the same low level as before. AB′C′E represents this share. The superiority of the best over the poorest lands is now much greater than before, so that the share of income going in the form of rent is greatly increased, as represented by the triangle EC′D′. The aggregate income paid to labor and savers is, of course, larger than before, but the rate per capita or per unit of savings is not. Landowners have absorbed most of the increase.

What actually did take place is indicated in Figure 12. Here we start

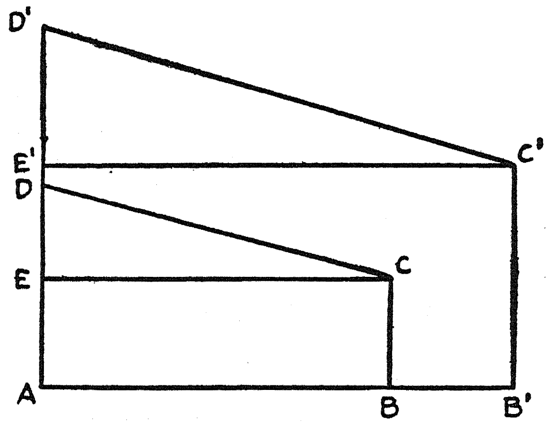

FIGURE 12. The Effect of Progress on Distribution as it has Taken Place in the United States.

with the same production as before, represented, as in the previous case, by the area ABCD. What Henry George failed to reckon with was the fact that the increase in production took place at a much faster rate than the growth of population, and we added new land to our territory, so that the margin of cultivation, instead of being pushed to the point indicated in the previous diagram, stopped far short of that, and the product at the margin itself was materially raised, as shown by the line B′C′. The result was that the major share of increase went to labor and the owners of artificial capital, while land rents, tho larger in the aggregate, absorbed no greater a proportion of the social income than before. The triangle E′C′D′ is the same proportion of the area AB′C′D′ as is the triangle ECD of the total area ABCD. Hence, the Single Tax explanation of poverty will not hold for this country during the years covered. His remedy, therefore, would hardly suffice to remove it. However, had it not been for the continual acquisition of new territory in this country, George's picture of the course of events might have been closer to the truth. It might be, for instance, that in older countries of fixed land area, such as Great Britain, Germany, or France, we would

find a much larger share of the social income paid out in rents to landowners than here. Now that practically all of our land is occupied, it may grow scarcer relative to the other factors, causing rents to rise. This need not happen, however, if the growth of population is not excessive, and if science and invention can find ways of continually increasing the product of labor *at the margin*—which seems altogether likely.

An obstacle to the adoption of the Single Tax program rests in the fact that we have permitted the private ownership of land to exist so long that the present owners claim a vested interest in their property which it is the duty of society to protect. These owners, in many cases, have acquired their land by purchase, and not by mere appropriation of the free gifts of nature. The price they paid represents savings which they have accumulated and invested in these properties. The original owners have sold out their interest and disposed of the money they received therefor in other ways. To confiscate land rents now means to take away the income derived from these savings, virtually confiscating them. Meanwhile the original recipients of the unearned increment are unaffected, because they have died or sold out. This discriminates unjustly against those who have invested their money in land as contrasted with those who have invested their savings in other forms of property. Suppose that a group of stockholders have acquired a right of way for the construction of a railroad by purchase of the necessary land. They then issue bonds to secure funds for the actual work of construction. The Single Tax would confiscate the earnings of the stockholders because they are derived from landownership, but it would leave untouched that of the bondholders because it is derived from improvements. Yet both were obtained thru the investment of savings in good faith, and it is hard to justify such discrimination between them. If we could get the income of the original owners who sold the land to the stockholders, it could be justified. In other words, the Single Tax might have been a good thing if it had been applied from the very beginning, so that no one could ever have received the unearned increment. But to take away the income of all landowners now is rather drastic. Some may justify it on the basis that the social benefits will outweigh the injustice to the landowners, but this argument will not appeal to the more conservative.

A More Moderate Land Tax Program.—Notwithstanding these objections, our previous analysis supports the Single Tax contention that land rent is an unearned income, and we have seen that this is one source of large fortunes. It is therefore good policy to restrict the further derivation of incomes from this source. Many, and probably most, economists support this view, but are keenly aware of the injustice of taxing away the vested interests of present landowners. They are, therefore, inclined not to disturb the rents already attached to land, but they do favor the

so-called *unearned increment tax,* which would appropriate future increases in land values. As the rent-yielding capacity of a piece of land rises, due to the growth of the community or other causes, an annual tax could be laid upon it sufficient to confiscate this purely unearned increase, without in any way disturbing the present value of the land and the income derived from it. The desirability of this is strengthened by the fact that authorities on public finance are now generally tending toward the view that land is a more suitable object for taxation than the improvements erected upon it. Hence it is believed wise gradually to reduce the tax on real estate improvements while increasing those upon the bare land itself. In time this might be carried to the point where the improvements were no longer taxed at all and the land taxes were so large as to absorb the major portion, if not the whole, of the land rent. If this increase in land taxation was made so slowly that the burden in any one year would not be oppressive, and in such a way that the major part of it would fall upon succeeding generations, the injustice to those who have invested savings in land would not be serious. Another possibility would be for the law of inheritance to be so changed as to provide that all lands transferred at death should henceforth be subject to a tax sufficient to appropriate the rents thereof.

But land taxes should never be made the sole source of public revenue, partly for the reason, already given, that they would not prove sufficient, and also because there are other taxes equally desirable from a social point of view. Besides, land rents are not the only unearned incomes, as our analysis proves. It is therefore reasonable to tax these other revenues, or appropriate them in some way to the social use.

The Reduction of Excessive and Unearned Profits.—Our study of the sources of great fortunes indicated that they are more often derived from business profits than from rising land rents. If we would check them, therefore, we must find some means of curtailing profits of excessive size. In various parts of this volume we have already considered proposals, designed primarily for some other purpose, which would be very helpful in accomplishing this end. We need only review these proposals here and point out their significance for the problem in hand.

If we are to appropriate the unearned increment from land by taxation, it might be thought that the most suitable way to attack the problem of excess profits would be by similar means. Taxes upon the excess profits of business enterprizes or upon the net incomes of corporations would have this effect. But the analysis of such taxes in Chapter XXIII will show that they are very unsatisfactory. The absence of any standard as to what constitutes a normal profit, the accounting difficulties involved, and the ease with which such taxes can be evaded by the concealment of profits, all interfere with the success of such measures. They may be justified

in time of war when the unusual gains of profiteers provide a fruitful source of revenue to the government, but they are not suitable for incorporation in a permanent tax program. Moreover, they do not get at the real cause of the difficulty. It is much more desirable to prevent unearned profits from being made than to tax them away after they have been received.

In many of the chapters in Parts II and III we considered steps which might be taken to secure greater stability in business life. Some of these, such as the control of money and credit, the gathering and dissemination of statistics, and business forecasting, are designed to correct the fluctuations of price levels and business cycles. Others, such as the development of scientific methods of business management, the integration of industry, the improvement of our marketing organization, and the promotion of friendly relations between employers and employees, are aimed at correcting seasonal variations and the interruptions caused by irregular demand, labor troubles, and the like. All of such improvements, by leading toward the general stabilization of business activity, will reduce excessive profits, as well as losses; for it is out of the dynamic and uncertain changes of industry that pure profits and losses arise. The increasing scope of insurance, which is now providing protection against many losses formerly thought to be non-insurable, will also reduce the irregularities of business gains by pooling the risks of many individuals and spreading them over the whole business world.

Among the most frequent sources of large fortunes are those unfair business practices, such as fake stock deals, wildcat financing, the production of adulterated or worthless merchandize, and the exaction of monopoly prices, which were described in an earlier paragraph. Many of these undesirable activities are being weeded out by the action of the business men themselves, thru the influence of chambers of commerce, "Better Business Bureaus," trade associations, and the like. There will always be some anti-social persons, however, who can only be restrained by public authority. We must, therefore, rely upon effective governmental regulation. We need only to recall the activities of the Federal Trade Commission in preventing unfair business practices, the control of trusts by this body and by public officials under the authority of the Sherman and Clayton acts, the regulation of railroads and other public utilities by the Interstate Commerce Commission and the public service commissions of our various states, and the control of banking thru the machinery of the Federal Reserve System.[6] There is taking place a gradual increase of governmental participation in industry. We may anticipate that this increase will continue, and that as government becomes more efficient and its scope is widened,

[6] Some of these types of regulation have been described in earlier chapters, especially in Part III. Others will be more fully discussed in Part V.

such ill-gotten gains as have figured in the making of large fortunes in the past will in the future be less frequent.

We cannot expect to eliminate all large business profits so long as we retain the fundamental institutions of capitalism, such as free enterprize and competition, but it will be recalled that we are not seeking to abolish all inequality. The principal end which we hope to accomplish is to prevent the larger elements of unearned income, and this is not impossible.

The Restriction of Inheritance.—In section A we saw how the institution of inheritance perpetuates inequality in a way that is undesirable. The most practical plan for curtailing this evil is by inheritance taxation. The pros and cons of such taxes will be more fully set forth in Chapter XXIV. The argument in their favor is strengthened by what has been said about inheritance above. For the state to appropriate a considerable part of the wealth of a person at death deprives no one of money that he has earned, and it will prevent the perpetuation of inequality from generation to generation and the maintenance of a parasitic class. The only strong argument against it is that it would interfere with the accumulation of capital by discouraging men of ability from amassing a fortune. To this it is sufficient to reply that it is doubtful whether the desire to leave one's wealth to one's descendants is as strong a motive for accumulation as the love of power and prestige. If sufficient capital is not accumulated to meet the needs of industry, the rising interest rate will point out the danger in sufficient time to permit steps to be taken to remedy the deficiency.

If an inheritance tax is to be employed as part of a program for the correction of inequality, it should be steeply progressive. Otherwise it will have very little effect in actually breaking up large fortunes. The rates should increase both with the size of the bequest and with the distance of relationship of the heirs. Such a tax will help to lessen inequality in two ways. By placing heavy taxes upon the rich, it will make possible the reduction of the tax burden borne by the poor; and if the government uses the revenue derived from it in ways that contribute to the general welfare, it increases the real incomes of the masses. It would not be expedient to abolish altogether the institution of inheritance, and a property-owner should at least be permitted to provide for the support of surviving dependents. A husband and father assumes an obligation to his family which society should respect. When he marries and places upon his wife the burdens of a family and household, he makes it practically impossible for her to earn her own living; and when he brings children into the world someone must provide for them during their minority. It is, therefore, entirely appropriate that he should bequeath them enough to maintain the wife in comfort and to provide adequate living and education for the children. More than this,

however, they have no right to expect, and to give them more is socially undesirable. Beyond this point, the drastic restriction of inheritance is perfectly justified.

Eugenio Rignano, an Italian economist, has made the unique and interesting suggestion that inheritance taxation should be made progressive not only as to the size of the estate and the distance of relationship of the heirs, but also as to the number of generations thru which the estate has been transmitted. When wealth is passed from father to son he would tax it moderately, but when that son, in turn, bequeaths it to his son, he would place a much heavier tax upon it. He would permit no bequest at all to a third generation. In addition to this, he proposes that the state should take its share of the inheritance, not in money, but in real property. By so doing, most of the permanent wealth of the country would gradually pass into the government's hands, so that in time there would be ushered in a régime of national ownership, practically amounting to socialism. In fact, the scheme is designed to bring about socialism by gradual steps. Its desirability, therefore, rests upon the desirability of socialism itself. This subject will be dealt with in a later chapter.

Progressive Income Taxation.—Even after the foregoing measures are made effective, considerable inequalities of income will no doubt still prevail. Further equalization can be accomplished by the progressive taxation of personal incomes. The merits of such taxes will be explained more fully in a later chapter. It is enough for the present to point out that a progressive income tax will tend to reduce inequality by appropriating large slices of the larger incomes to the public use, while bearing but lightly upon smaller incomes. The more steep the rate of progression is, the greater will be this effect. Hence, the increasing use of progressive income taxes in our country and elsewhere is helpful in solving our problem. The taxation of incomes, however, is treating the symptoms of inequality, and not the causes. It is a less fundamental reform than some of the other measures which have been suggested. We should endeavor to accomplish the prevention rather than the confiscation of large incomes.

C. Increasing the Level of Wages

Low Wages and Poverty.—Whereas most of the large incomes of society are derived from land rents and business profits, the low incomes are obtained usually from wages. Hence, the raising of wages is a method of correcting the evils of inequality from the other end of the income ladder.

Low wages make for low income, but not all poverty is the result of insufficient wages. Poverty is largely due to the occurrence of such mis-

fortunes as unemployment, sickness, accident, and old age, which are to be regarded as interruptions to, rather than insufficiency of, income. For this reason, the measures suggested in an earlier chapter for the reduction of unemployment, and systems of social insurance to meet such contingencies as sickness, accident, and old age, will help to bring about the abolition of poverty. This work will be furthered also by the general improvement in medicine and knowledge which makes for the reduction of disease and ignorance. No small amount of poverty can be attributed to inefficient use of income, even where the earnings are sufficient and uninterrupted. Hence, the improvement of habits of consumption among the lower working classes will be required.

But even after these causes of poverty have been removed or compensated for—in fact, even after acute poverty has been completely eliminated—there will still be inequality and some incomes which are undesirably low. The problem of inequality is not so much one of poverty as it is of relative differences. Not only dire want, but the contrast between those who have enormous wealth and those who are only moderately supplied with this world's goods, is to be dealt with. To correct this we must supplement measures to reduce large fortunes and to prevent acute poverty by a general program for increasing rates of wages.

Can High Wages be Maintained by Law?—In Chapter XXV we shall learn that attempts have been made to maintain wages above a minimum level by legal compulsion, and that these attempts have sometimes been successful. It would be a happy solution of our problem if we could solve it merely by passing laws fixing all wages at a level sufficiently high to afford a comfortable living; but correcting the diseases of the social organism is not so simple a matter. It is possible to fix a wage by law and to enforce its payment by employers, provided it does not differ too much from prevailing market rates for the type of labor in question. But in applying such legislation we are confronted with the fact that the demand for labor is elastic; that is, employers find it unprofitable to employ as many workers when wages are high as when they are low. Higher wages induce them to dispense with certain marginal employees who were just about worth their hire when wages were lower. They can do this by substituting machinery or labor of a cheaper grade to do the work formerly done by the laborers who are discharged. This is in accordance with the principle that wages are set by the value contributed to the product by the marginal workers of each class. If, by compulsion, we fix a higher wage than that which formerly prevailed, we simply raise the margin and force out of employment those submarginal workers whose contribution is not worth their hire to their employers. For this reason, if high minimum wages are established, they merely throw out of employment all those workers who cannot really earn the wage. The most that laws of this sort can do is to keep wages up to the normal competitive level for

unskilled labor in those sweated industries where they have been depressed by the ignorance and inferior bargaining power of the labor employed. Therefore minimum wage legislation, tho desirable in such cases, is no solution for the general problem of low wages.

Trade Union Activities to Increase Wages.—Laborers have sought to solve many of their own problems by organizing themselves into unions which deal collectively with their employers. One object of such unions is to force the payment of high wages to their members. A union can coerce its employers into paying higher wages than would otherwise prevail if its organization is strong enough to control the supply of labor in its trade. But, as in the case of minimum wage laws, it has to reckon with the elasticity of demand for labor. At a high wage, employers will not engage as many workers as they will use at lower wages. Hence, the union can maintain its increase only at the expense of providing employment to fewer persons.[7] Its wage policy would soon break down if there were many unemployed workers in its trade clamoring for positions. The successful maintenance of high wages is only possible to such unions as maintain a labor monopoly and restrict the number of workmen admitted to their trade. They do this by rules limiting the number of apprentices admitted in any one year, by prohibitive initiation fees which keep out new members, and by similar means. This is no remedy for low wages thruout the field of industry, for if wages are kept up in one trade by an artificially created scarcity of workmen, more persons are forced into some other employment, thereby depressing wages there. Moreover, labor unions are strongest among those skilled and intelligent workmen who are already obtaining fairly good wages. They do not usually reach the unskilled classes whose earnings are most in need of increase.

It was pointed out in the last chapter, however, that some trade union policies do prevent that temporary depression of wages below their normal

[7] This will usually be true, because ordinarily employers have some power to substitute machinery for labor, or one type of labor for another. Hence, if a union forces an increase in the wages of one kind of labor, they are likely to make such substitutions in order to avoid the rising costs occasioned by the increase. Even if the employers cannot make such substitutions, the higher labor costs will be likely to force them to raise the price of their product, thereby reducing their sales and compelling them to curtail production and thus reduce the number of men employed. There are probably some cases, however, where the technical conditions of industry make a certain kind of labor practically indispensable (no substitute for it being available), and where the demand for the product is so inelastic that the rising price occasioned by the increase in wages would not greatly reduce the sales. Here the union might maintain its demand for higher wages without causing a decline of employment in its trade. In this case the increase in wages would come out of the pockets of consumers. It might also be possible that a similarly indispensable type of labor would be employed in the production of a commodity controlled by a monopoly, which could not shift the extra cost of higher wages to consumers because the price was already pushed up to the point of maximum net returns. In this case the increase in wages forced by the union would come out of the monopoly's profits. Other exceptions to the general principle above stated may be found, but it is the judgment of the present writers that trade union demands for increases in pay will not be effective in raising the real wages of labor in industry at large.

level which is occasioned by circumstances from time to time. Lack of mobility and collective bargaining among the working classes permits wages in some occupations to be kept down below that prevailing for labor of a similar type in other employments, and even below that prevailing in other plants in the same industry. Trade unions, by insisting on wage rates which maintain substantial uniformity thruout a trade, and which keep them on a rough par with wages for similar labor in other trades, assist the forces of competition in maintaining the equality of earnings thruout a competing group. Trade unions can also offset the sluggishness of wages in responding to increasing demand or growing scarcity. And they can tide labor over periods of interrupted earnings occasioned by unemployment, accident, or sickness, thru out-of-work benefits, which are in the nature of insurance funds. But none of these are remedies for the general problem of low wages.

The solution of this problem lies mainly beyond the power of trade union organizations. They can, however, by encouraging certain legislation and industrial policies, use their influence to assist such increase. In so far as they tend to increase the efficiency of labor or stimulate employers to increase the efficiency of management, they contribute to that general growth of production which raises the real wages of labor, along with all other forms of income. But this does not change the relative inequality of distribution. If they would encourage a reduction in the supply of labor, by fostering high standards of living and small families among the workers, they could actually promote a real increase in the relative share of labor.

Increasing the Supply of Scarce Productive Agents.—To a very large extent, each factor in production constitutes a demand for the others which are employed in combination with it. For example, a large supply of labor requires much land and tools for its effective employment. In this case the owners of land and artificial capital will be well paid, relative to labor. On the other hand, a large supply of land and instrumental capital cannot be utilized effectively without laborers to work it, in which case wages will be high. If there are many skilled laborers, more unskilled men will be needed to assist them. On the other hand, when unskilled workers are abundant, there is a demand for skilled men with which to make their labor more effective.

An exception to this principle exists where one factor of production can be used as a substitute for another. In so far as new capital takes the form of labor-saving machinery, for instance, it tends to decrease, rather than increase the demand for labor.[8] Most of the evidence goes to show, however, that effects of this kind are not the general rule. A general

[8] This does not mean that the introduction of machinery will cause permanent unemployment; but it may reduce the *value* of labor, in relation to that of capital.

increase of artificial capital or land is pretty sure to result in raising the demand for and hence, the wages of, labor. The supply of natural capital cannot be very greatly increased, but something can be done along this line by land reclamation projects, such as the drainage of swamps and the irrigation of deserts. In view of the agricultural surplus existing in the United States, however, such projects should be entered upon with caution at the present time. The supply of artificial capital can be substantially increased by additional saving. Hence, the encouragement of thrift is advantageous to labor. The wages of unskilled labor, which are most in need of increase, can be improved by increasing the number of skilled, in relation to unskilled, workers.

The Control of Population Growth. Eugenics.—The most fundamental and direct method of increasing the share of labor is to bring about its greater scarcity. It is the excessive numbers of people, especially in the lower non-competing groups, that is the most persistent cause of low wages. This brings us back to the general problems of population growth which were discussed with some fullness in Chapter X. We there pointed out the desirability of maintaining the number of people at the optimum level and of checking the birth rate among the lower classes of society. The attainment of these objectives would do more than any other thing to improve the incomes of labor in general, and of poorly paid labor in particular. One measure suggested for accomplishing this was the restriction of immigration. The annual coming to our shores of millions of immigrants prior to the World War was a cause for low wages among unskilled labor. It was directly encouraged by employers who desired a supply of cheap labor for their operations. We have finally corrected this by the present immigration laws, which drastically cut down the number of foreigners who are annually admitted. This should prove one factor making for an increase of wages for unskilled labor. It must be supplemented by a reduction in the birth rate, especially among the poorer classes of society. The progress of eugenics, which seeks to encourage the growth of numbers among the superior stocks of our population and to discourage it among those which are inferior, if it can be made effective, will have a general leveling effect upon wages, preventing the depression of earnings now caused by the excess of numbers in the lower strata.

The Influence of Education and Other Improvements in the Environment.—Since the stratification of society into non-competing groups is not solely due to biological factors, the uneven distribution of numbers among these groups can be partly corrected by changes in the environment which increase the opportunities for advancement open to members of the more poorly paid classes. The wider diffusion of education is probably the most hopeful measure of this sort. Without education one is likely to be limited to unskilled occupations. With education he is able to

find more remunerative employment. The general effect of more widespread schooling is to increase the ranks of skilled workmen and to decrease the numbers of people capable only of cruder manual work. This tends somewhat to reduce the wages of the former and raise the wages of the latter. Many persons feel, however, that the curriculum commonly prevailing in our school system is not well adapted to accomplish this purpose. It has been too largely dictated by the requirements of higher learning. High schools adapt their courses to the entrance requirements of the colleges, and primary and intermediate schools fall in with the requirements of the high schools. The result is a literary and cultural emphasis ill adapted to the needs of the average workman. The vast majority of our children never get thru high school, much less thru college. Hence, it is advocated that there should be more vocational training, which will equip these persons to earn a living at some skilled trade. An increasing measure of attention to this problem is being paid by school authorities, and more of this type of education is coming into vogue.

Finally, most general measures of social reform are likely, directly or indirectly, to raise the wages of labor. The elimination of the slums in our cities, the improvement of home conditions thru clubs and settlement houses, the promotion of better health,—all such work tends to raise the quality of our people, both morally and physically, thereby equipping them for a higher type of employment. This tends to lessen the ranks of those unskilled, incompetent workmen whose earnings are deplorably low.

Summary

A program for the reduction of inequality must be based upon a study of its causes. The most fundamental and general causes are differences in the hereditary abilities of individuals and in the opportunities afforded by their environments. More specifically, great fortunes are derived mainly from increasing land rents and from business profits, largely of an unearned sort. The accumulation of such fortunes is facilitated by the intangible nature of much modern property, and it is perpetuated by the inheritance of wealth. Small incomes, on the other hand, result from low wages, due to the abundance of labor, especially among the unskilled.

Single Taxers propose to abolish poverty by taxing away the rent of land, but they exaggerate the importance of land rent, and the immediate adoption of their program would be unjust to those who acquired land by purchase. Unearned fortunes derived from land can be reduced by a more moderate program which would gradually increase the taxation of land. Excessive and unearned profits can be lessened by measures of busi-

ness stabilization, monopoly control, and the regulation of business practices. Inheritance should be restricted by steeply progressive inheritance taxes. Any remaining inequality can be further reduced by progressive income taxation.

Low wages, as distinguished from poverty, cannot be corrected by minimum wage laws, except in sweated industries, for such laws merely force into unemployment those who cannot earn the wage. Trade unions can ordinarily force an increase in wages only by restrictive labor monopolies, which cause depression of wages elsewhere; but they can prevent inequalities resulting from lack of mobility and competition in the labor market, and they can foster general increase in productive efficiency. Increasing the quantity of land by reclamation, and of artificial capital by the promotion of savings, will tend to raise the share of labor. The restriction of population growth, especially among unskilled workers, by the curtailment of immigration, by reduction of the birth rate among the poorer classes, and by eugenic measures generally, will help to raise and equalize wages. Increasing education and general measures of social reform, by equipping labor for work of a higher type, also have this effect.

SUGGESTIONS FOR FURTHER READING

Two brief surveys of the nature and causes of inequality are to be found in F. W. Taussig's *Principles of Economics* (3d ed., 1921), Chap. LV, and L. D. Edie's *Economics:Principles and Problems* (1926), Chap. XXIII. Edwin Cannan's analysis of inequality in the incomes from property and from work, in Chapters XI, XII, and XIII of his *Wealth* (1914), is both original and suggestive. For an account of how our great fortunes have been made, one of the following should be consulted: J. W. Jenks, *Great Fortunes: The Winning, the Using* (1906); A. Youngman, *The Economic Causes of Great Fortunes* (1909); G. P. Watkins, *The Growth of Large Fortunes* (1907).

The above books are rather lacking in suggestions for the correction of inequality. H. Dalton, in his *Some Aspects of the Inequality of Incomes in Modern Communities* (1920), makes such suggestions, stressing the reform of inheritance laws. Henry George's *Progress and Poverty* (1879) is at once the oldest and the best presentation of the Single Tax doctrine. More conservative is the program of T. N. Carver for increasing the supply of capital and decreasing that of labor, as set forth in his *Essays in Social Justice* (1915), Chaps. XIV and XV. His discussion of Single Tax, inheritance and monopoly in Chapters XI to XIII is also appropriate. A brief treatment of the problem of poverty, as distinguished from inequality, is contained in J. H. Hollander's *The Abolition of Poverty* (1914). Part V of A. C. Pigou's *Economics of Welfare* (1920) treats of some measures for the correction of inequality which are not often dealt with, but they are palliatives rather than measures of constructive reform, and the discussion is somewhat ponderous.

PART V

ECONOMIC ASPECTS OF GOVERNMENT

CHAPTER XXIII

FINANCING THE GOVERNMENT

A. Public Expenditures

The Field of Public Finance.—Just as an individual must receive income and make expenditures in order to live, so must a government possess sources of revenue to secure the funds necessary for the maintenance of the manifold varieties of public activity. The expenditures of a government are for the purpose of satisfying the collective wants of the members of society, rather than the wants of particular individuals. The provision of parks, roads, schools, police protection, etc., can best be accomplished by collective action. *Public finance is that branch of economics which deals with the problems of raising and expending revenues to meet the costs of government.* Finance means the management, or the conduct, of monetary affairs of any kind, and public finance, consequently, refers to the conduct of the monetary affairs of our government.

It was interest in the problems of public finance that gave rise to many of the writings of the early economists. The old name for the subject of economics, *political economy,* indicates this close relation. As we will see in Chapters XXV and XXVI, the government is both a huge business in itself and a source of control over various forms of private business. The way in which it raises and expends funds affects every phase of the economic structure of modern life; sound government financing can substantially assist in creating or maintaining national prosperity. It is therefore the duty of every citizen to be well informed as to the general principles of sound public financing. Too often, without adequate study of the issues involved, the citizen seeks blindly to avoid taxation, and rewards with his vote the politician who promises tax reduction; political considerations dominate instead of questions of social well-being.

The Importance of Public Finance.—A clear picture of the importance of sound public financing can be obtained by a brief survey of the expenditures made by our government. In 1934, the expenditures of the federal government were $6,745,185,992. The expenditures of the state governments for that year were $2,044,000,000.[1] Local governments incurred a total of $5,621,000,000 expenditures in the same period. This gives an aggregate per

[1] State and local estimates made by the National Industrial Conference Board, *Cost of Government in the United States, 1933–1935,* p. 4.

capita cost of about $112.36 for all governmental expenditures in the United States in 1934. These expenditures equal about thirty per cent of our national income. The national income of the United States for the year 1934 has been estimated at $47,600,000,000 or $377 per capita. In 1919 the financial burdens of the World War increased the expenditures of the federal government alone to almost $19,000,000,000 or roughly twenty-eight per cent of the national income of the country for that year.

The Growth of Public Expenditures.—Not only are the expenditures of the governmental units of the United States enormous in size, but they have shown a marked tendency to increase steadily as time passes. This has

Year	*Total ordinary federal expenditures**	*Per capita ordinary federal expenditures***	*Total estimated national income of U. S.*** (000,000 omitted)*	*Total estimated national income per capita*
1850	$ 39,543,492	$ 1.71	$ 2,214	$ 95
1860	63,130,598	2.01	3,636	116
1870	309,653,561	8.03	6,720	174
1880	267,642,958	5.34	7,391	147
1890	318,040,711	5.05	12,082	192
1900	520,860,847	6.85	17,965	236
1910	693,617,065	7.52	30,530	332
1917	1,977,681,751	20.24	53,200	521
1918	12,696,702,471	132.39	60,200	581
1919	18,514,879,955	180.75	67,400	642
1920	6,403,343,841	58.10	74,300	697
1930	3,440,268,884	28.02	70,300	571
1932	4,741,015,145	37.49	39,400	315
1934	6,745,185,992	51.83	47,600	377
1936	8,476,558,108	63.35	63,800	491
1937	8,001,187,347	58.98		

* Data from United States Treasury, *Annual Report,* 1937, pp. 351-353. Figures here given do not include expenditures for public debt retirement or postal service, except deficits. Relief expenditures from 1932 to 1937 are included.

** Population for non-census years estimated.

*** For sources of data on national income from 1850 to 1910, see *infra,* p. 21; from 1917 to 1936, see *infra,* p. 22.

caused much apprehension in the minds of many people. The table above gives a summary of the trend of federal governmental expenditures from 1850 to 1937. It will be noticed that, except for the periods following the Civil and World Wars, the trend of federal expenditures, both total and per capita, was rapidly upward. The increase is not confined to war expenses, but is characteristic of other items as well. The table given shows that the secular trend of expenditures of state and local governments has also been upward. The decrease in expenditures for the year 1934 was temporary and reflects the effect

of the business depression on tax yields, especially the property tax. Collections were low and tax-payers secured reductions in property valuations. The estimates for the subsequent years indicate a resumption of the upward trend.[2]

GROWTH OF STATE AND LOCAL EXPENDITURES

	1913	1923	1931	1934
Per capita expenditures of state governments	$ 3.97	$11.14	$19.07	$16.84
Per capita expenditures of local governments	$19.10	$42.97	$56.21	$48.62

Expenditures of the governments of the various nations of Europe show similar tendencies to increase

Causes of the Growth in Public Expenditures.—Is the increase in public expenditures we have just observed a matter of grave public concern? As already pointed out, one of the greatest causes of the increases in these expenditures has been the preparation for war and the fighting of wars. War not only leads to direct expenditures, as, for example, the purchase of munitions, but also leads indirectly to other expenditures, such as pensions, veterans' insurance, and hospital relief. According to Professor Bullock,[3] 80 per cent of federal expenditures in 1870 should be charged directly or indirectly to war, and by 1902 this percentage had only diminished to 70.6 per cent. International competition in increasing war armaments, combined with the direct and indirect financial cost of our participation in the World War, has maintained expenditures for war purposes. At the time of the present writing it is probable that less than one-third of all federal expenditures can be labeled as for strictly civil purposes.

But we have observed that even ignoring war expenditures and considering only other federal, state, and local public expenditures, the trend is decidedly upward. The reason is found in the constant expansion of the duties of government, both intensively in expanding duties already assumed, and extensively in assuming totally new obligations. The widening sphere of governmental activity will be described in Chapter XXV. Public improvements such as the Panama Canal, western irrigation projects, new roads and new bridges all require the expenditure of large sums of money. The expenditures for our growing school system have been increasing. The regulatory activities of public authorities over business such as the inspection of foods, the inspection of factories, and the establishment of new state and federal commissions demonstrate the trend.

Another important factor has been the concentration of population in cities. Writers frequently assert that public expenditures observe the law of

[2] National Industrial Conference Board, *Cost of Government in the United States, 1929–1930*, p. 17; *1933–1935*, p. 7.

[3] Charles J. Bullock, *Selected Readings in Public Finance* (1906), p. 49.

increasing cost.[4] This is especially true in cities over 50,000 in population. The larger the city the greater the per capita expenditure necessary to maintain almost every activity of the city government. There is an abundance of data to show that fire protection, health and safety, police protection, street building, and similar activities increase progressively in cost as a city grows in size.

The tremendous increase in federal expenditures since 1934 is largely explainable by the entrance of a new factor—severe depression and the consequent need of government action. The absolute amount of regular operating expenses has remained fairly constant over the last decade; but whereas this type of outlay accounted for eighty per cent of expenditures in 1928, by 1936 other needs had so increased that the relative importance of the former had declined to thirty-five per cent of the total outlay. The main factors responsible for the great increase in public expenditures are relief and public works, with bonus payments playing an important rôle in 1936. Whereas no expenditures were incurred by the federal government for relief in 1928, by 1935 thirty-two per cent and by 1937 thirty-one per cent of total outlays were accountable to relief. Likewise, only five per cent of public outlay was attributable to public works in 1928, while in 1937 thirteen per cent (of a much larger total) was for public works. In 1936, the surprizing figure of nineteen per cent of total expenditures was reached for bonus prepayments.

In sum, expenditures of the federal government in 1937 for public works and relief were almost as great as regular operating expenditures in that year, the former amounting to three and one half billion dollars out of a total of eight billion.

If the scope of governmental activities is to continue expanding, states taking on new social and economic obligations, the expenditures of governments must also go on increasing, necessitating constantly the raising of greater revenue. It would be a very short-sighted policy to force our public authorities to abandon useful activities just to satisfy a misguided desire to reduce taxes. In fact, it may well be that taxes are *too low* and should be raised in order that the government may assume obligations that are impossible of assumption under existing conditions because of the lack of sufficient funds. A test of an efficient government is not found in the *amount* of money it spends, but in the *manner* in which it does it. An efficient government is one that performs its duties in such a way as to secure the greatest possible social good from the money it disburses.

The Economic Effects of Public Expenditures.—In paying out money the government purchases goods in competition with private citizens. The maintenance of a proper balance between public and private expenditure is important. The large fraction of the national income received and spent by the governmental units of the United States cannot but have a powerful influence on the entire economic life of the nation.

[4] *Cf.* Carl C. Plehn, *Introduction to Public Finance* (1926), pp. 24–25.

The guiding of productive activity, the prices of commodities, and the prices of the agents of production must all be materially affected.

We learned in Chapter III, that industry produces commodities under the guidance of consumers' demand as expressed on the market. Every addition to public activity giving rise to increased expenditures gives the government greater control over production, with the consequence of limiting individual freedom of choice. Each citizen must contribute towards the maintenance of parks, schools, roads, and other forms of collective want-satisfaction regardless of his own individual inclination. The expenditure of that part of his income is out of his immediate control. Industry is thereby diverted into channels very different from those which might otherwise have existed.

The effects on the prices of commodities are greatest when important changes are made in the volume of public expenditures in certain directions over a short period of time. During the World War federal expenditures expanded primarily for the purchase of war materials. Private citizens, desiring commodities needed by the government, had to pay prices equal to those which it was willing to pay. As was pointed out in Chapter XII, the government found itself facing the alternative either of accepting exploitation or of fixing prices by public authorities.

The prices and apportionment of the agents of production are affected by government expenditures in a similar manner. Wages of labor, for example, were increased, not only because of the withdrawal of men into the army, but also because of the high wages paid in the war industries. A furniture factory or department store in the vicinity of Philadelphia was forced to compete with shipyards and munition plants located along the Delaware River for the labor supply. Since the demands for furniture and the services of the department store had not been increased, the prices charged by these private enterprizes could be increased but slightly to meet the rising labor cost. The operation of this influence resulted in the curtailment of non-essential industries and the expansion of industries producing war essentials. Many a business man producing non-essentials was forced into bankruptcy. With the end of the war the reverse of this process took place; the advantage in competition for the scarce agents of production again shifted.

In peace times the economic influences of government expenditures are less striking but none the less operative. They show up clearly with the passage of "pork barrel" legislation, each locality seeking to obtain from the federal government public improvements, such as irrigation projects, post offices, army post and naval stations, knowing that they will increase (at least temporarily) the prosperity of the locality. Lamentably slight is the thought given the welfare of the nation as a whole.

In the light of these economic effects we may venture three general

rules of sound public policy in making public expenditures. First, no new function should be assumed, or old function expanded, unless the increased activity can be done better by public than by private enterprize, and unless the utility yielded is greater than the cost assumed. Second, changes in the volume of public expenditure should be spread over a period of time to avoid the serious readjustments that are sometimes necessary in the economic organization. And third, the expenditure should be spread over as wide an area as is consistent with the purpose in mind, in order to diffuse the effects.

The Budget System.—It is an axiom of sound public finance that public revenues should closely approximate public expenditures. A large surplus is bad, since it induces extravagance; and deficits not only cause temporary embarrassment to the public authorities but also increase the financial cost of government. Just where the limit to increased public expenditures should be fixed, it is impossible to state exactly, for it varies with the time and place under consideration. The best check on the financial administration of a government is the adoption of the budget system. *A budget is a detailed estimate of the financial requirements of a government for a stated period of time, prepared in advance by designated officials, and submitted to the legislative body for approval.* "Thus, the budget may be spoken of as being prepared, as being voted or ratified, as being executed, as being audited and controlled. It goes thru all of these stages."[5] The adoption of a budget system places the government on a sound financial basis. It is the only satisfactory way of knowing accurately in advance the needs of the government, and the resources available to satisfy them. Political bickering is reduced, since the departments make their request for appropriations to the budget officials instead of directly to the legislative body. Usually the budget official is responsible to the executive branch of the government, securing thereby executive responsibility. Publicity is attained; each department must come out publicly in advance and defend its request for the appropriation of public funds. In 1930 every state but one had a budget system of some form, usually with the governor an important if not controlling factor.[6] An act of Congress established the national budget system for the federal government in 1921. Under this law a budget bureau was established, charged with the duty of preparing a national budget to be transmitted by the President of the United States to Congress. All departments make their requests to the Bureau for the appearance of their appropriation on the budget. Final authority, however, rests with Congress, since the Constitution gives Congress the sole power to raise revenue and make appropria-

[5] Charles W. Collins, *The National Budget System and American Finance* (1917), p. 1.

[6] Article by L. D. White, *Public Administration*, published in *Recent Economic Trends*, *op. cit.*, p. 1406.

tions. The successful operation of the national budget and the confidence placed in the Bureau of the Budget is demonstrated by the manner in which actual congressional appropriations closely follow the budget estimates.

B. General Principles of Taxation

Sources of Public Revenue.—Modern governments secure their income from a wide variety of sources. Chief among these sources are taxation, fees, earnings from public enterprize,—including income-yielding property and revenue from commercial activities,—fines, penalties, and free gifts. We shall discuss the place of each one of these sources of revenue in our American tax system in the following chapter. Governmental units also receive funds by means of public borrowing, but such receipts must not be classed as revenue. Eventually they must be repaid out of taxes or some other source, and consequently it would be an error to consider borrowed funds as revenue. At the present time, the major portion of government revenue is secured thru taxation. In the remaining parts of this chapter we shall discuss some general principles of taxation and public borrowing, reserving for the following chapter more specific analysis of the use made of the various sources of public revenue.

Taxation Defined.—*A tax is a compulsory payment levied by a governmental authority without regard to the specific benefits the taxpayer may receive.* When individual citizens receive specific benefits, a fee can be charged for that service, but the major portion of the services which a government renders for its citizens benefits all of them in general rather than certain individuals. The services of our public officials, the army, the navy, the police departments, the fire departments, and similar public agencies are rendered to all collectively. Consequently everyone who is able is required to contribute towards the support of these activities. Taxes may be roughly divided into two classes, personal taxes and property taxes. A personal tax is illustrated by income taxation, inheritance taxation, and profits taxation, while a property tax is illustrated by levies against real estate, mortgages, and tobacco. The right to tax, that is, to extract compulsory payments without regard to specific benefit received, is one of the essential attributes of the sovereignty of a government.

Justice and Efficiency in Taxation.—A system of taxation that treats the citizens of a nation unjustly is a source of grave danger. A tax system should be constructed to treat fairly and justly the various groups that make up the total population. A good tax is one that is socially expedient, efficient in its administration, and just in the way in which it distributes the burden of taxation among the citizens upon whom it is levied.

Social expediency must be considered, since, even tho viewed merely fiscally (that is, as a source of revenue), a tax at the same time affects

the social welfare of the citizens who must make payment. High income taxes tend to reduce the inequality of incomes. Taxes on luxuries tend to discourage their consumption, while low taxes on land and buildings tend to encourage individual home owning. Exemptions granted to individuals supporting dependents are justified on the ground of public interest. Frequently the purpose of a tax in the minds of its advocates is primarily the remedying of social maladjustments rather than the obtaining of needed revenue, but these two aims should be clearly distinguished and separately evaluated before any tax is adopted.

Administratively, a good tax should possess the following features: (1) It should be certain as to the time and manner of payment. The citizen has a right to know definitely in advance when his tax is due and how it must be paid. (2) It should be collected in a convenient manner. (3) The expense of collection should not be excessive. Some taxes require such an elaborate staff of officials for collection that the proceeds are not worth the effort involved.

Just Distribution of the Tax Burden.—Attempts to set up just standards for the levying of taxes have brought forth many interesting theories. The three most widely held are the benefit theory, the equal sacrifice theory, and the ability to pay, or faculty, theory.

The benefit theory states that a government confers numerous benefits on its citizens, and the tax burden should be so distributed that each citizen pays in proportion to the benefit he individually receives. The difficulty with this theory is the impossibility of measuring the benefit which each person receives from the services of the government. To illustrate, how can the advantage enjoyed by different individual citizens from the army and the navy be separated and evaluated? Where the services of the government do lead to directly measurable benefit, as, for example, the maintenance of almshouses, poor farms, free medical and dental service, and public parks, the individuals receiving the services are able to contribute very little, if anything, to the government's support. However, this theory justifies in part high taxes on the wealthy, for the benefits of the protection of property are far greater to the rich than to the poor. The benefit principle should be restricted to the fixing of fees.

The equal sacrifice theory states that taxes should be so levied that the sacrifice imposed on each citizen would be equalized. The less the sacrifice felt by the taxpayer, the greater the tax to be paid. Here again we are confronted with the difficulty of measurement, for how can one tell just what is the burden suffered by an individual when he is making payment of taxes? Even two individuals having exactly the same incomes would not necessarily feel the same burden from paying identical taxes. Sacrifice would vary with differences in education, training, occupation, number of dependents, and similar factors difficult of evaluation.

The ability to pay, or faculty, theory states that all citizens receive in the protection of life, liberty, and property more than they can ever repay the government, and the only just form of taxation is one requiring every citizen to contribute in proportion to his ability to do so. This is the theory most widely held at the present time, and it gives the most workable basis for the building of a scientific tax system. However, the difficulty of measurement remains in a modified form. When life was simple and wealth principally of a material sort, this theory could be followed with relatively little difficulty. But under modern conditions the problem is very complex. What test of ability to pay should be used,—the amount of property a man owns or the income he receives? If property is taken as the basis, persons holding material wealth that cannot be hidden, such as land, buildings, and cattle, will be taxed heavier than those persons owning stocks, bonds, mortgages, and similar intangible property that can be easily concealed. If income is taken as the basis, the question, What is income? arises. How is income to be defined? Some have suggested the amount of goods consumed by an individual should be the measure of the tax burden. But this is the equivalent of exempting savings from taxation, and it would place the tax burden most heavily on individuals living on small incomes who can save but little, reducing the burden on rich persons who necessarily save large fractions of their income.

Proportional, Progressive and Regressive Taxation.—Once the basis for taxation has been accepted, the question of determining the rate of tax must be settled. Does it follow from the ability to pay principle that taxes should be *proportionate* or *progressive?* If Mr. Smith has an income of $2,000 a year and Mr. Thomas an income of $6,000, a proportionate tax of 5 per cent would mean that Mr. Smith would pay $100 as a tax and Mr. Thomas three times that amount, or $300. Each would pay the same proportion of his income. But many persons believe that when a poor man pays 5 per cent of his income his burden is far greater than that of a rich man in paying a like percentage. The richer a man is, the less he feels the burden of a tax, in proportion to the burden felt by a poor man. This is an application of the economic principle of diminishing utility. A poor man spends most of his income for food, clothing, rent, and other necessities of life, while the income of the rich man is spent largely for luxuries, or is added to his savings. A progressive tax might therefore be more just. In such a tax the rate, or percentage, increases (*i.e.*, progresses) as the taxpayer's income, or wealth, increases in amount. Smith might be charged 5 per cent and Thomas 8 per cent. The following table will illustrate the difference between proportional and progressive taxation. It assumes seven different incomes which are to be taxed.

Income	*Proportional Taxation*		*Progressive Taxation*	
	Rate	*Amount*	*Rate*	*Amount*
$ 2,000	5%	$ 100	5%	$ 100
4,000	5%	200	6%	240
6,000	5%	300	7%	420
8,000	5%	400	8%	640
10,000	5%	500	9%	900
15,000	5%	750	10%	1500
20,000	5%	1000	11%	2200

Just how progressive a tax should be it is difficult to say, but the principle has been accepted and put into practice thruout the world. There is no definite rule of action to be followed and we can only hope that the wisdom of law-makers, tempered by the publicity given their decisions, will result in a workable approximation of justice.

Some tax rates are *regressive* rather than progressive. The greater the income or wealth, the lower the rate actually paid by the taxpayer. Taxes are seldom consciously made regressive, but proportionate taxes have a tendency to operate in a regressive manner under certain circumstances. Thus most of the wealth of small property-owners is usually tangible property in the form of real estate, while the more well-to-do have a larger proportion of their wealth in the form of intangible securities. Evasion, so easy in the latter case, tends to make a tax on property regressive. Also, assessors appraising the property of wealthy individuals frequently lack the ability to make a fair appraisal and tend to underestimate the value of larger holdings.

The Shifting and Incidence of Taxation.—The citizen who first pays a tax does not necessarily assume the final burden of it. He may sometimes reimburse himself by collecting the amount of the tax from someone else. This is called *shifting* the tax. Thus, the tax placed on the manufacture of cigars is levied with the knowledge that the manufacturer will add the tax to the price of his product, placing the burden on the ultimate consumer. The *incidence* of a tax refers to its final resting place, or the distribution of its cost. The person on whom the tax burden finally falls, when further shifting is impossible, is said to bear its incidence. The study of the shifting and incidence of taxation is one of the most difficult in all economics. The naïve belief, widely held, that taxes, regardless of their nature, are ultimately shouldered by the consumer in his purchase of goods, is very far from the truth. Certain taxes quite obviously can be shifted but very little, if at all. For example, a tax of 10 per cent on personal incomes cannot be shifted. The taxpayer must grin and bear it. On the other hand, when an importer of French china pays a customs duty on his importation, he expects to add the duty to the price of the china when he sells it to a shopkeeper or a department store. The retail store,

in its turn, expects to reimburse itself when the china is finally sold to the householder who desires to make use of it in his home. However, the ability of the importer to raise the price depends on the demand for the china; higher prices will cut off sales, and tend to reduce the earnings of the importer. He will then seek to obtain lower prices from the foreign producer, and if he suceeds the foreigner shares the burden of the tax. All enterprizers, foreign and domestic, who assist in the manufacture or the marketing of the imported china, will be forced to readjust themselves to a fall in demand caused by the rising price. Just what the distribution of the burden of the duty will finally be depends on a complex set of forces. "A tax is, as it were, a sticky substance, and like pitch or shoemaker's wax, some of it may adhere to every hand or thread that touches it."[7]

Shifting and the Theory of Prices.—The theory of the shifting and incidence of taxes can be best understood by an analysis of the manner in which a tax on commodities affects their prices. It is in the effect of a tax on prices that the degree and character of shifting is determined. If a tax had no effect whatever on the economic forces of demand and supply, the principle that all taxes on commodities are shifted ultimately to the consumers would be correct. However, a tax on a commodity must be included in the costs of its production, and at once a set of economic forces is put in operation that will bring about variations in the price of the product. We cannot here trace this problem in detail, but the principles involved are well illustrated by the effect of a tax on a commodity in relation to the elasticity of demand and the nature of production costs of that commodity. In Figure 13, let us assume the curve DD to be the demand curve, and SS the supply curve, of a certain grade of wheat. Wheat being produced under conditions of diminishing returns, the supply curve appears as an increasing cost curve. The competitive price would, under the assumed conditions, be fixed at 70 cents per bushel, with total sales of 5,000,000. If a tax of 10 cents were levied against each bushel, the supply curve would move to TT. At 80 cents—that is, the original price plus the tax—fewer bushels could be sold, and a new equilibrium between demand and supply would be reached, with the sale of 4,600,000 bushels at about 75 cents a bushel. It will be noticed that the effect of the tax was to reduce the sales and raise the price of wheat, but the price did not increase by the amount of the tax. This is because with the decrease in effective demand, the reduced volume of production gives less pressure against diminishing returns, and the lower costs offset somewhat the imposition of the tax. Just how great an increase would take place in price depends on the elasticity of demand. The dotted line D′D′ shows an inelastic demand, and it will be observed that the resulting price in this

[7] Carl C. Plehn, *op. cit.*, p. 312.

case, if the tax were levied, is higher than in the case of the demand curve DD. Figure 14 illustrates conditions of decreasing costs. Here it will be

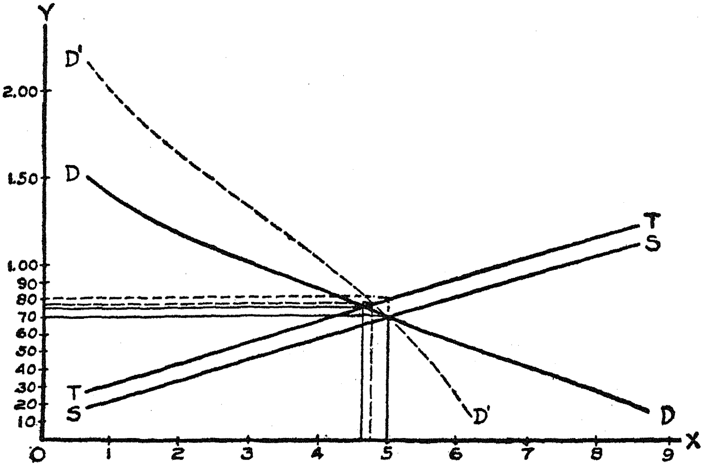

FIGURE 13. The Effects of a Tax Under Conditions of Increasing Costs.

noticed that the effect of the tax is to raise the price *more* than the amount of the tax. The curtailment in the quantity of output reduces the possibilities of large-scale production. The amount of the price increase here is also

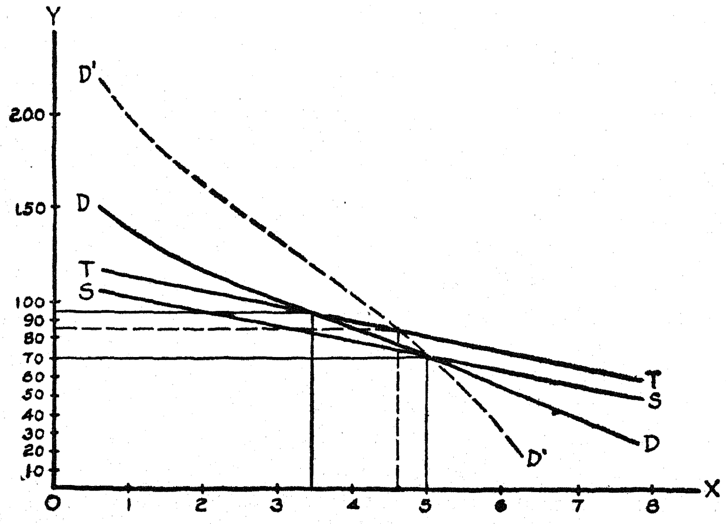

FIGURE 14. The Effects of a Tax Under Conditions of Decreasing Costs.

affected by the elasticity of demand. D′D′ shows an inelastic demand, and it will be observed that the more inelastic the demand, the less the price increase. Figure 15 illustrates conditions of constant costs, where the

effect of the tax is to raise the price to an amount just equal to the tax. Elasticity of demand in this case does not affect the price, but merely alters the number of units sold.

Since the ability to shift the tax depends on the ability of the business

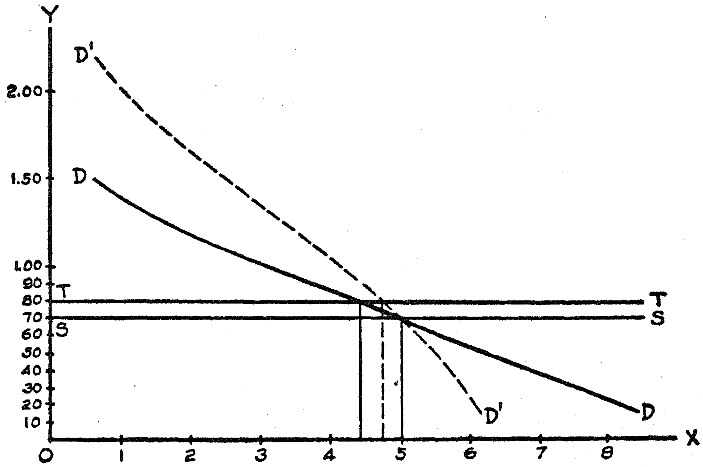

FIGURE 15. The Effects of a Tax Under Conditions of Constant Costs.

enterprizer to add the tax to the price of his product, and since the conditions of supply and demand are different for every product, the complexity of the problem of determining incidence can be appreciated. This explains the reluctance on the part of most tax authorities to say definitely just what the distribution of the tax burden may be in specified cases.

Taxes on Surplus.—As stated above, unless a tax can affect the price of an economic good or service thru its effect on the supply of the commodities or services concerned, it cannot be shifted. Authorities, consequently, generally hold that taxes on economic surpluses cannot be shifted. By an economic surplus we here mean a return or income for economic effort over and above the amount necessary to bring forth that effort. A good illustration is a tax on business profits. As we have had occasion to note in previous chapters, costs of production differ from producer to producer in any industry. We have marginal producers whose costs just equal the price secured for their produce, and we have differential producers whose costs are less than the market price, giving them a surplus income, usually spoken of as profit. The theory of price tells us that the price of an economic good tends to equal the costs of the marginal producer. Therefore, a tax that affects the marginal producer's costs brings about a change in the supply of the product, and must necessarily affect the price. But a tax based on the amount of surplus of the differential producers would not affect the supply of the product, and conse-

quently would not affect its price. The differential producer would have no way of shifting the burden of a levy against his surplus, for the price has already been determined at the margin, at a point higher than his cost of production. Therefore, a tax on a surplus, such as business profits, cannot be shifted.

This same reasoning, with but slight modification, applies to all forms of excess profits taxes, income taxes, and inheritance taxes. In each case, the supply factors are outside the control of the persons taxed.

Taxes on Durable Wealth.—Taxes on durable forms of wealth are also difficult to shift. This can be clearly demonstrated by tracing the effect of taxes on real estate. Here we have two separate agents of production: land, which is a non-reproducible agent, and a building, which is a reproducible agent. If a tax were placed on a given piece of real estate, who would bear the burden? The immediate effect would be to reduce the market value of the property. Changes in the supply of land are impossible except within very narrow limits, and changes in the supply of buildings can take place only after the lapse of relatively long periods of time. If the owner of the taxed real estate sought to sell it, he would find prospective purchasers, in making their price offers, deducting the capitalized value of the tax. In other words, they would compare the net yield secured from the property after paying taxes with the yield that could be secured from other forms of investment. The full burden of the tax would then fall on the owner in possession at the time the tax was levied, should he seek to sell the property immediately.

However, buildings are producible goods, and if new buildings of a similar type are to be erected, the return from them must cover the total costs of production, including the tax. True, owners of buildings already erected must for a time bear the full burden of the tax, but gradually the supply of buildings would be affected by the higher costs of production, and in time the value of buildings would increase to cover that cost, tax included. Otherwise buildings would become scarce (because no new ones would be built) until the price did rise. This would shift the burden of the tax to prospective purchasers or lessors of the property. But the supply of land cannot be affected, and this reasoning does not apply to land. That part of the tax levied against the land must be borne by the original owner; because, since the supply of it cannot be decreased, it will not command a higher price than before. The same analysis holds for other forms of durable wealth. Here we may state as the general principle, that *taxes on durable wealth cannot be shifted unless the wealth can be reproduced, and where reproduction is possible, the longer the period of time necessary to adjust supply to the new cost conditions created by the imposition of the tax, the longer the period in which shifting of the tax is impossible.* Because the capitalized value of a tax is deducted from the purchase price of non-reproducible durable wealth, taxes of this type

are spoken of as burdenless in the long run. Once the property is sold, the burden is discounted in the purchase price. We must note, in passing, one qualification to this principle. If a prospective purchaser, considering various forms of investment, finds that *all* are taxed equally to the tax placed on land, it would then be true that, in purchasing the land, he would be forced to assume the burden of the tax. Since all investments would bear the same tax, the owner of land would not then be at a disadvantage as compared with other forms of investment. It is only in so far as taxes on the durable wealth are *greater* than those on other forms of investment that the principle we have stated holds true.

A Good Tax System.—When the expenditures made by governments were very small, the tax burden was so slight that its nice adjustment among the citizens was relatively unimportant. With the increase in the scope of government activities, and the rapid increase in expenditures, this problem became more serious. The greater the portion of the national income that accrues to the government, the more important it is that the revenue be justly collected. The complexity of the problem of determining the incidence of a tax should warn us against hasty, ill-considered tax legislation. The safest policy would be for the legislator to levy, if possible, only those taxes the incidence of which can be fairly accurately determined, avoiding taxes the incidence of which is extremely doubtful. In this way, the maximum degree of control of the distribution of the tax burden can be achieved. A good tax system, then, is one that (1) distributes the incidence with maximum justice, in accordance with the principle of ability to pay, and (2) adheres closely to the principles of efficiency in tax administration. No single tax can accomplish these ends. The student should keep in mind, as he surveys the tax system of the United States in the next chapter, these general principles.

C. Public Borrowing

The Extent of Public Borrowing.—Practically all the units of government, from the federal government down to the smallest township, make use of borrowing as a source of public funds. The extent of the public borrowing by the federal government is indicated by the following table:[8]

Federal Public Debt for Selected Years

Year	*Total debt* (In thousands)	*Per capita debt*
1880	$ 2,090,909	$ 41.69
1890	1,122,397	17.92
1902	1,178,031	14.89
1912	1,193,839	12.48
1922	22,964,079	208.97
1931	16,801,485	135.37
1933	22,538,672	179.21
1937	36,427,091	281.82

[8] Secretary of the Treasury, *Annual Report* for 1937, pp. 410, 411.

The enormous increase in borrowing between 1912 and 1922 shows the influence of World War financing. The considerable reduction from 1922 to 1932 resulted from a salutary policy of debt retirement. The refunding operations of outstanding obligations improved the financial position of the federal government by reductions in interest rates and by the rearrangement of maturity dates. The extensive depression financing of 1933–1938 raised the debt figure to its highest peak in history.

The tendency towards increasing public indebtedness has not been restricted to the federal government. State government indebtedness increased from $274,746,000 in 1880 to $2,360,958,000 in 1932; the per capita debt increased from $5.48 to $19.07 during the same period. The public debt growth of local governments, especially cities, is even more remarkable. For 146 cities with populations over 30,000 in 1903, the per capita public debt increased from $44.71 in that year to $159.70 in 1931. For 94 cities of 100,000 or more population, the per capita debt in 1935 was $170.03. The ease with which tax exempt securities could be sold, the expanding activities of local government, and the almost delirious spirit of optimism during the years just prior to 1930, were all important factors in the movement.

European nations show a similar trend. The following table gives the total indebtedness of the more important European nations before entering the war and after the close of the war.[9]

National Debts of European Countries

	Before 1914		1919	
	Total (In millions)	*Per capita*	*Total* (In millions)	*Per capita*
Great Britain	3,458	75.03	37,657	817.04
France	6,598	166.20	30,494	768.11
Italy	3,031	82.55	15,009	408.78
Russia	5,092	27.95	54,402	298.61
Belgium	722	94.28	1,889	246.67
Germany	1,165	17.18	40,007	589.97
Austria	2,631	84.99	17,071	551.42
Hungary	1,602	74.82	8,909	416.11

These enormous public debts are based on the credit of the governmental units concerned. The governments have promised to pay certain sums of money at certain times designated in the future. The obligations are similar to those of private individuals or corporations, with the exception that the creditor cannot enforce repayment of the principal in case of failure on the part of the borrowing agency to do so. A state is a sovereign power, and the only security the creditor has is the taxing

[9] Data from L. R. Gottlieb, *Debts, Revenues and Expenditures and Note Circulation of the Principal Belligerents, Quarterly Journal of Economics,* Vol. 34, pp. 164–165, November 1919.

power of the state, plus the desire to maintain a good credit status in case of need for further borrowing.

Reasons for Public Borrowing.—The wide variety of purposes that give rise to public borrowing may conveniently be classified under three heads: temporary financing, the financing of public works, and emergency financing.

Temporary financing refers to the practice of issuing short-time credit obligations. These obligations are usually issued for a period of from one day to six months. When used by our federal government they are popularly known as treasury notes, or treasury certificates. They are employed to smooth out irregularities in the flow of, and need for, income. At times, the actual revenue received by a government is not as great as was anticipated; or perhaps expenditures are greater than had been expected. In either case short-time loans are authorized to finance the deficit until a readjustment of taxes can restore the balance between income and expenditure. Short-time notes are also used to anticipate income from taxes or bonds. Taxes are frequently paid annually or semi-annually, and the yield of bonds comes in practically all at one time. The government needs its revenue, however, in recurring amounts spread over a period of time. The use of short-time obligations assists in equalizing irregular receipts with the recurrent need for income. The general public buys these short-time obligations quite readily, at low rates of interest, since they constitute a very safe investment for funds which the investor does not wish to tie up permanently, but desires to keep in as liquid a form as possible.

To embark on new *public works,* governments find it necessary to borrow the funds required. These projects are of two general types,—those that yield income in the future, and those that do not. The ownership and operation of public utilities, such as gasworks, waterworks, electric light companies, or street-car lines, forces municipalities to borrow to secure funds with which to build a plant, or to take over a plant already in operation under private enterprize. State governments have aided in the construction of railroads, irrigation projects, toll bridges, and, in a few instances, they have operated banks, warehouses, insurance departments, and other similar enterprizes. Ventures of the federal government in this direction include the post office, the Panama Canal, and the government-owned railroad of Alaska. Non-income-yielding public works include roads, streets, schools, hospitals, charitable institutions, and public buildings.

Borrowing for public works has a legitimate place in the financial system of any governmental unit, provided it is done judiciously. Expenditures that are both large in amount and irregular in occurrence are necessary, and the normal receipts from taxes may be insufficient to supply the funds required. Where an income is obtained, the interest

charge and repayment of the principal should be paid out of future earnings, unless for special reasons it is decided that social welfare is better served by running an enterprize at a loss, meeting the deficit out of taxes. This is a dangerous practice, however, and should be resorted to only with great caution. Where the project yields no income, the rule is that the period of the loan should not exceed the life of the improvement. To issue twenty-year bonds to pay for the building of a city street that will only last half that time is not sound financing. Also, where possible, a "pay as you go" plan is better. In a large city, the needs for new schoolhouses and new streets are fairly regular and predictable each year, and the ordinary tax system should be so constructed as to take care of these annual improvements out of current revenues.

Emergency financing refers to the unexpected need for large sums of money as a result of the occurrence of a national calamity. The conducting of war and the repairing of such disasters as the Mississippi River flood and the Japanese earthquake, require quickly funds much greater than the existing tax system would yield. The issuance of bonds enables the funds to be received immediately, and the indebtedness can be repaid out of taxes gradually over a period of time. The problems involved in this type of borrowing are best illustrated by the financing of a war, and we will discuss this below in greater detail.

Forms of Public Borrowing.—The forms which government evidences of debt may take are short-time notes, bonds, and paper money. Short-time notes are issued for temporary financing. Bonds are issued for much longer periods, and it is in this form that most of the public borrowing takes place. The issuing of paper money, while not popularly so considered, is a form of public borrowing. The government is paying for goods and services secured with printed promises to pay standard money some time in the future. When a government prints an issue of paper money and uses it to meet its financial obligations, it is in effect forcing the general public to loan goods and services without interest.

Tax-exempt Securities.—In order to stimulate the purchase of its certificates of indebtedness, especially bonds, governments frequently adopt the practice of issuing such securities partly, or completely, free from subsequent taxation. The issue of securities exempt from taxation, in whole or in part, permits their marketing at a lower rate of interest than would otherwise be possible, giving the government an advantage over private enterprizes in the competition for the loanable funds of the community. It also reduces the amount of money that must be raised by taxation to meet the annual interest charge. Many of the bond issues of the federal government are tax-free in varying degree, including the bonds of the Federal Land Banks, Federal Reserve Banks, and the Liberty Loan issues. The

controversy as to the desirability of the practice of issuing tax-exempt securities has centered around the issue of bonds by state and local governmental units. The Supreme Court of the United States has decided that the federal government has no constitutional right to tax state and local government bonds, and the interest paid to the holders of such securities is consequently exempt from federal income taxation. According to an estimate made by the United States Treasury Department, there were over $19,000,000,000 worth of state and local bonds outstanding in 1930, and the tendency towards constantly swelling this total has been viewed with alarm by many persons prominent in public life.

The principal criticisms directed against the issue of tax-exempt securities are three in number. First, it is said that the purchase of these securities supplies an avenue for the evasion of the surtaxes levied under the federal income tax. To the citizen with a small net income, there is no advantage to be gained from the purchase of a government bond paying a low rate of interest, possessing the tax-free feature, but to the rich citizen, whose income is large enough to be taxable in part at the high progressive rates which now prevail, worthwhile saving results—the lower interest yield is more than offset by the exemption from taxation. Second, some federal officials have asserted that capital is diverted from productive private enterprizes to non-productive public expenditures. And third, it is charged that the ease with which tax-free securities can be issued stimulates extravagance on the part of state and local governments.

The importance of tax-exempt securities has in all probability been very greatly exaggerated. The issue of private corporate securities during recent years has increased at a far more rapid rate than the issue of government tax-exempt securities, indicating that legitimate industrial enterprizes have been little hampered in securing funds in competition with the government. Also, there is a strong probability that a large portion of the tax-exempt securities outstanding have found their way into the reserves of corporations restricted in the type of investments they can legally make,—insurance companies, banks, and surety and bonding companies, for example. The portion held by rich persons to evade income taxation must be relatively insignificant. The argument that capital is diverted into non-productive channels is fallacious almost to the point of absurdity. Surely the building of bridges, roads, and schoolhouses is just as productive as the manufacture of perfumes, victrolas, radios, and automobiles! The distinction between productive and non-productive activity must be made on a very different basis from that of public *versus* private enterprize. However, tax-exempt securities do constitute a weak link in our fiscal system. They interfere with the operation of one of the most desirable features of the federal income tax,—its conformity with the ability to pay principal. Their use should be restricted, if necessary, by

the passage of an amendment to the federal Constitution permitting the federal government to tax state and local issues. Such action would have the dual effect of adjusting the tax burden more fairly and supplying a healthy check on rash expenditures on the part of local authorities.

War Finance.—Every war in which the United States has engaged has been partly financed on borrowed money. This is also true of the wars fought between European nations. There has arisen much heated controversy as to the desirability of this practice. Three possibilities are open to a government seeking to finance the conduct of a war. First, most of the revenue can be raised thru taxation. Second, a large portion of the revenue required for the emergency can be secured thru borrowing and the issue of paper money. Third, a combination of borrowing and taxation can be used. The immediate result is the same in any case, for either borrowing or taxation give the government possession of immediate purchasing power with which it can secure economic goods and services required for the waging of the conflict.

The use of borrowing to finance wars has many decided advantages. Most important of these is the speed with which the required revenue can be obtained. To construct, put into operation, and collect taxes requires many months, if not several years. The sale of bonds gives revenue at once. Secondly, the borrowing of money gives the government control over idle capital, free for investment in the community, while taxes, in many cases, must fall on functioning productive enterprizes. Third, if bonds are very widely sold, they increase public interest in the conduct of the war. This assists in gaining support for the administration's policies, and at the same time brings about an immediate curtailment in consumption, for many persons who buy the bonds do so only thru reducing their personal expenditures. Finally, the heavy tax burden that it would be necessary to place on the community to finance a war completely from taxes would create popular dissatisfaction and would have an unfortunate effect on the morale of the people. Persons who object bitterly to taxes buy bonds willingly.

However, those who favor the use of taxes to finance a war have very strong arguments on their side. First, the use of bonds adds to the cost of war. The bonds must be repaid in the end anyway, and meanwhile additional costs are incurred. The total interest charged during the life of the loan sometimes amounts to a sum greater than the principal. The administrative cost, both of floating the loan and collecting taxes later to pay it, adds to the expense of financing. The use of the bonds and paper money, if both these forms of borrowing are used, tends to raise the general level of prices; and this means that the government is constantly being forced to pay higher and higher prices for the products which it purchases. Second, taxes can be collected more easily under the wave of patriot-

ism during the war, while an increase in taxes following the war may cause popular resentment. And third, a tax system gradually constructed during the war is more apt to distribute the burden justly than would a tax system devized after the war. This is because certain economic classes, chiefly business enterprizers, gain financially because of war, and these classes can be heavily taxed on the ground that they must not profit unduly while others are giving their lives for the national safety.

When the two sides of the case are balanced, it appears that the best system of war financing is one that relies mainly on taxation, resorting to borrowing only where further taxation would be inexpedient. Taxation should be made use of right at the start of hostilities, and should be gradually increased while the war spirit runs high. Some borrowing is justified to obtain immediate funds, and to avoid disturbing the economic organization of the nation unduly. Also, within limits, public opinion must be taken into consideration. It is impossible to lay down any more definite rules than these. Each emergency has its own peculiar characteristics.

Shifting the Burden of a War.—There is a widely-held belief, among those not well versed in economic principles, that public borrowing shifts the burden of a war to the next generation. It is said to be unfair to expect those living at the time of a war to assume the burden in full, when part of the fruits will accrue to generations yet unborn. The use of bonds is supposed to shift a part of the burden to the next generation, for the next generation must meet the bonds when they mature. The fallacy of this reasoning can easily be demonstrated. The burden that is being shifted must be either physical or financial. Let us consider these two possibilities. When a war is fought, the government requires guns, shells, ships, clothing, food, and similar products. From where do they come? Obviously from the flow of national income at that time. You cannot eat the wheat or wear the clothes in 1918 that will be produced in 1950. This means that the generation fighting the war must limit its consumption and use the surplus for war purposes. You cannot borrow material wealth from future generations. But what of the financial burden? Does not the next generation pay the bondholders when the period of maturity comes due? Let us consider what takes place. In 1950, we will assume, an issue of bonds falls due. Where will the government get the funds with which to meet these obligations? Obviously from taxing American citizens. Money is collected from American taxpayers and turned over to American bondholders. The net result is that the nation as a whole is neither richer nor poorer after the bonds have been paid than before. The only difference is that those who paid the increase in taxes are poorer, while those who held the bonds are just that much richer. It is redistribution of wealth that takes place within the nation rather than the assumption of a burden

financially by the nation as a whole. To put it another way, the per capita wealth and income of the citizens of the nation will be exactly the same just prior to, and just subsequent to, repayment of the government loan. The only exception to this is in case the obligation was due another nation, in which case one nation gains and the other must lose. Even then, however, the *world as a whole* would be no richer or poorer; a shift in the ownership would have taken place.

The only burdens a war places on the next generation are the maintenance of cripples and other war casualties, the maintenance of tax collectors that otherwise would not have been required, and a smaller capital equipment than would have existed if material wealth had not been destroyed during hostilities.

The Discharge of Public Debts.—Once public debts have been incurred, the problem of discharging them in the future must be considered. Here the alternatives are: repayment of the obligation out of revenues, its repudiation, or its renewal by issuing new securities. If repayment is to be made, funds must be gathered prior to the date of maturity to meet the heavy drain that will come at that time. One common practice is the use of a sinking fund; that is, a fund into which revenue is placed annually in certain designated amounts for the purpose of ultimate repayment of the public debt. The use of such sinking funds has not been very successful. Public officials, especially in cities, have been lax in placing money in the sinking fund and have frequently been very unwise, if not dishonest, in the selection of investments while the fund is accumulating. A better practice is the issue of serial bonds. Under this plan, for instance, if a loan is for a ten-year period, the maturity dates of the bonds are arranged in series, so that each year a certain portion, say one-tenth, will fall due. This automatically reduces the obligation without the use of a sinking fund. Repudiation of outstanding debts is not unheard of. Several of our state governments have taken this reprehensible step. The effect is disastrous on public credit, and amounts to the confiscation of the bondholders' property. The renewal of a maturing obligation is frequently the easiest plan to adopt. New securities can be issued and the proceeds used to meet the obligations of the old. This amounts to perpetuating the debt. In Europe, especially in England, it is a common practice for governments to borrow funds for an unlimited period of time. This amounts to the sale of annuities. The government, in fact, agrees to pay in perpetuity a specified sum of money each year. Under such conditions no provision for repayment need be made. The government can retire each year whatever portion of the outstanding annuities its surplus revenue warrants, but it assumes no obligation to do so. This system has the defect, however, of reducing the pressure on public authorities to retire the outstanding debt. There has been a far

greater tendency towards the reduction of public indebtedness in the United States, for example, than has taken place in Europe.

Summary

Public finance deals with the problems of raising and expending revenues to meet the cost of government operation. Its importance is indicated by the fact that the total expenditures of governmental units of the United States were about $112.36 per capita in 1934. Government expenditures have been rapidly increasing. This has been due to: (1) the growth of expenditures directly or indirectly chargeable to war; and (2) the widening sphere of government activities, including public ownership, education and depression measures. The concentration of populations in large cities has also been a causal factor. The large fraction of national income received and spent by the governmental units of the United States has an important influence on the economic life of the nation. The guiding of productive activity, the pricing of commodities, and the pricing and use of the agents of production are affected. Public expenditures should be as nearly equal to public revenues as possible. A surplus is undesirable because it induces extravagance, and deficits cause temporary financial embarrassment. The budget system is the best check on inefficient financial administration of the government.

The chief sources of public revenues are taxes, fees, earnings of commercial activities, fines, penalties, and free gifts. Governmental agencies also receive funds from borrowing, but such receipts must not be considered revenues, since they must later be repaid. A tax is a compulsory payment levied by governmental authority against its citizens without regard to specific benefit received. Taxes are of two types, taxes on persons and taxes on property. Justice in taxation requires that a tax shall be well administered, conform to the demands of social expediency, and distribute the tax burden justly. The three most widely held theories of justice in distributing the tax burden are the benefit theory, the equal sacrifice theory, and the ability to pay, or faculty, theory. The last is the most commonly accepted. Rates of taxation may be proportional, progressive, or regressive. The burden of taxation does not always fall on the individual who first makes payment to the government. Taxes are sometimes shifted in whole or in part to other individuals. The persons on whom the tax burden actually falls are said to bear the incidence of the tax. A tax affects the price of the product thru its effect on its demand and supply. Taxes on commodities are shifted, at least in part, but taxes on an economic surplus are generally not shifted. Taxes on durable wealth cannot be shifted unless the wealth can be reproduced.

Practically all units of government make use of public borrowing.

The reasons for such borrowing are temporary financing, the development of public works, and emergency financing. The forms assumed by government obligations of indebtedness are short-time loans, bonds, and paper money. Wars are largely financed on borrowed funds. Taxation should be used, however, in so far as possible. The issue of bonds does not shift the burden of war to the next generation, for only the materials in existence at the time can be utilized, and the next generation raises money to redeem the bonds by taxing itself—only a redistribution of wealth takes place. Public indebtedness can be discharged by repayment, repudiation, or renewal of the obligations outstanding. In Europe funds are sometimes borrowed for unlimited periods of time, and under such conditions no definite plan of repayment is necessary, tho it is desirable.

SUGGESTIONS FOR FURTHER READING

Very satisfactory treatments of the general field of public finance are Alfred G. Buehler, *Public Finance* (1936); Jens P. Jensen, *Government Finance* (1937); H. L. Lutz, *Public Finance* (1936 ed.); Carl C. Plehn, *Introduction to Public Finance* (1926); and W. J. Schultz, *American Finance and Taxation* (1934 ed.). Professor Plehn's book is especially useful for theoretical analysis. Dr. Schultz's work contains an interesting part discussing the legal and administrative aspect of Public Finance; his book is rich in factual material. Two interesting treatments from a British point of view are A. C. Pigou, *A Study in Public Finance* (1929 ed.) and Sir Josiah Stamp, *The Fundamental Principles of Taxation* (1936 ed.).

Edwin R. A. Seligman's *The Shifting and Incidence of Taxation* (1909), is the recognized authority on that subject. E. L. Bogart, *Direct and Indirect Costs of the Great War* (1920), gives a detailed analysis of the problem of financing the World War. The case for the budget system is ably defended in Charles W. Collins, *The National Budget System* (1917). H. L. Lutz's *Budgets, Bonds and Ballots,* an essay published in *Facing the Facts* (1932) as Chap. II, attacks this same problem from the point of view of practical experience. *Facing the Tax Problem,* published by the Twentieth Century Fund (1937) and written by experts in the field, is an excellent analysis of what taxes are and what they should be. Valuable statistical material can be quickly obtained from *Annual Reports* of the Secretary of the Treasury of the United States, and *The Statistical Abstract of the United States.*

For short treatments of the subject-matter of this chapter see: Sumner H. Slichter, *Modern Economic Society* (1931), Chap. XXVIII; S. H. Patterson and K. Scholz, *Economic Problems of Modern Life* (1937 ed.), Chaps. XIII to XV, inclusive.

CHAPTER XXIV

THE REVENUE SYSTEM OF THE UNITED STATES

A. Federal Revenue

Sources of Federal Revenue.—The Constitution of the United States provides that Congress shall have the power to levy and collect taxes, duties, imposts, and excises. It further provides that all direct taxes levied by the federal government must be apportioned among the various states in accordance with their respective populations, and that duties, imposts, and excises must be uniform thruout the United States. Direct taxes have been interpreted by Congress and the courts as those taxes levied on the person expected to bear the burden—that is, taxes that cannot be shifted; while indirect taxes are those which are not intended to be borne ultimately by the person on whom they are levied, but are supposedly shifted to other persons. In practice this distinction becomes very vague, but since the words direct and indirect are used in the Constitution, the terms continue to have an important influence on the structure of our taxation system. The result has been that up to 1913 the federal government secured practically all its revenue from indirect taxation—primarily excise and customs duties. Direct taxes have been levied and apportioned among the states only five times: two million dollars in 1798, three million dollars in 1813, six million dollars in 1815, three million dollars in 1816, and twenty million dollars in 1861. This last assessment was made to assist in financing the Civil War. These direct taxes were very unsuccessful, for the federal government had difficulty in enforcing their collection, and the method of raising the revenue was left to the selection of the individual states making payment. The tax of 1861 created so much protest that the funds obtained were afterward returned amid much scandal. Finally, in 1913 the Sixteenth Amendment to the federal Constitution was ratified. This amendment provided that, "Congress shall have power to lay and collect taxes on incomes, from whatever sources derived, without apportionment among the several states, and without regard to any census enumeration." The way was thereby cleared for the direct taxation of incomes, and this form of taxation rapidly developed into the most important single source of revenue in the federal tax system. The federal government also secures revenue from inheritance taxation. The principal

sources of federal revenue are, therefore, custom duties, excise taxes, income taxes, and inheritance taxes.

Customs Duties.—Duties charged on goods imported or exported in the course of foreign trade have proved both convenient and productive sources of public revenue. Many of the more backward and smaller nations of the world are forced to depend almost entirely on these *customs duties* (as they are called) for revenue. The Constitution of the United States forbids the levying of such duties by the states and limits the federal government to duties on imports. The power so given Congress is the legal basis for our protective tariff system. There are two forms of customs duties—revenue duties and protective duties, giving rise to revenue tariff systems and protective tariff systems. A revenue duty is one levied for the purpose of obtaining income for the government without any intention of assisting domestic industry in its competition with foreign business interests. Such duties operate most successfully when levied on a few selected commodities not produced within the nation. Since the duty tends to raise prices and thereby curtail demand for the product, revenue tariff systems operate most successfully when placed on low-priced necessities, the demand for which will continue in spite of the tax placed upon them. If the product on which the duty is levied is at all produced within the nation, revenue duties will to some extent automatically give protection to domestic producers. This can be avoided, however, by the imposition of an internal excise tax equal to the duty, thereby equalizing the competitive position of the foreign and domestic producers. This has been the practice in England, where the ideal of free trade has been until recently the accepted public policy.

Since the purpose of protective tariff duties is to limit imports rather than to secure revenue, a perfect protective duty would cut off completely the importation of the product and consequently would yield no revenue whatever. To put it in another way, it is only in so far as the protective duty does not give protection, but permits some goods to be imported into the country, that revenue is secured.

The protective tariff system of the United States has yielded tremendous revenue. Just before our entrance into the World War, approximately 50 per cent of the federal government's income came from this one source. The development of new taxes and the curtailment of international trade during and since the war, however, has reduced considerably the importance of customs duties, so that by 1936 only about 10 per cent of the federal revenues were so derived. As fiscal measures, customs duties are of questionable merit. The flow of income secured is very irregular and difficult to correlate with the government's needs. Also, every change made in the duties charged tends to dislocate home industry, since the degree of protection afforded is thereby varied. Finally, they do not conform to the principle of

ability to pay, for the duty is largely shifted to the consumer; the burden is borne in proportion to the taxpayer's consumption of dutiable goods, rather than in proportion to his ability to pay. The advantages of customs duties rest in their satisfaction of the administrative requirements of a good tax. They are certain in time and manner of payment, as well as convenient and relatively cheap of collection. Since the duty is paid finally by the purchaser of goods in the form of higher prices, the burden falls lightly in small amounts, and is usually paid without the citizen being conscious of the fact. This last advantage looms unfortunately large in the minds of legislators when enacting new taxation legislation.

Excise Taxes.—*A tax levied on a commodity prior to its final purchase by the consumer* is called an *excise tax*. Sometimes the tax is assessed at a selected intermediate stage during production, while in other cases it is assessed on the retailer of the finished product. In either case it is expected that the tax will be added to the selling price of the commodity and finally paid by the consumer. Excise taxes are therefore considered indirect taxes. Either of two methods of assessment may be followed. First, stamps may be sold and attached to the article. This makes the tax easy of collection and every individual who handles the commodity becomes an unofficial government inspector, for a glance will tell whether or not the tax has been paid. The second method is to require business men to report periodically their total sales. This method places a premium on dishonest reporting and usually leads to much evasion.

Excise taxes have been used primarily by the federal government in this country, tho there is a tendency towards an increase in their use by state governments. Chief among the federal excises are those on tobacco and alcoholic liquor. During the World War the list was considerably expanded, covering a wide variety of items, including automobiles, amusements, transportation and communication, bonds, stocks, insurance policies, and legal documents. Legislation subsequent to the war reduced the list gradually, but the depression years of 1930–1933 restored many of the old items. In recent years the federal government has received from excise taxes approximately one and a half billion dollars a year. The greater part of this sum represents the yield of the tobacco and liquor taxes.

The fiscal advantages and disadvantages of excise taxes are almost identical with those of customs duties, and the economic effects are about the same in both cases. The tax is administratively satisfactory, for it is cheap, convenient of payment, and yields large revenue. The burden on the taxpayer falls in very small amounts spread over numerous purchases. The serious weakness is its lack of conformity to the principle of ability to pay. The major portion of the tax is passed on to the consumer, so that the tax is really apportioned on the basis of the needs of consumers for the taxed commodity rather than on ability to pay. Since a poor man must

spend a larger proportion of his income for consumers' goods than a rich man, excise taxes tend to be, in effect, regressive. The burden placed on the industries affected is very heavy at the time the tax is first assessed, but in time they readjust themselves to the new conditions, and by shifts in prices and incomes thruout the community, the burden tends to be diffused. Just how this will work out depends largely on the elasticity of the demand for the commodity taxed. We have explained this in the preceding chapter. To be most effective, excise taxes should be placed on a few commodities that are very widely sold, and which have a rather inelastic demand, so that sales will not be cut too sharply by a slightly higher price. Tobacco, liquor, and salt have proved by experience to be among the best commodities that can be selected.

The Problem of Income Taxation.—Contrary to popular ideas, all taxes are paid out of income, even if a tax is levied on an item of capital, such as a factory. The taxpayer cannot detach part of a factory and give it to the government. The tax is paid out of the income secured from the factory. This fact, combined with the widespread acceptance of the ability to pay principle as the basis for just taxation, has resulted in the rapid growth of income taxation. It is claimed that the most accurate index of a citizen's ability to pay taxes is the income received by him. Some writers have gone so far as to suggest that all taxes should be eliminated with the exception of the income tax, thereby carrying to the limit the ability to pay principle. In practice, however, the difficulties encountered in measuring income and collecting income taxes are so serious as to make inadvisable its exclusive use. The use of the term income as a measure of ability to share in the tax burden requires at least tacit acceptance of a definition of the word. Unfortunately, there exist wide differences of opinion among recognized economists as to the definition of income. They have found the problem of definition most perplexing. Just what should be included in, and what excluded from, the concept? Is income the *money* one acquires within a period of time, the *goods* one buys with the money, or the *satisfaction* derived from the consumption of the goods? Should some commodities and services which do not involve money payments be included, as, for example, the services of a dwelling house occupied by the owner himself? Does a corporation have income independent of the income secured by the stockholders that make up the corporation?

The federal income tax amendment already quoted uses the word income without defining it. Consequently, the burden of definition has fallen largely on the Supreme Court of the United States. In other words, Congress can tax only what the Supreme Court recognizes as income. American income tax experience has cut the Gordian knot of definition by considering as income for tax purposes only actual receipts of money or money's worth, less actual expenses. The definition of income underlying the tax

law may be stated as *the receipt by taxpayers of money or money's worth growing out of the process of production and actually realized, after deducting all necessary cost of acquisition.* This definition has the merit of being administratively practical, but it contains numerous elements of what might be called injustice. For example, a farmer secures much of his living in the form of food and shelter direct from his own farm, but a bank clerk must purchase food and shelter out of his salary. Thus the bank clerk must pay an income tax on his expenditures for living, but, since the farmer does not secure receipt of money or money's worth for his living, he actually omits that part from his real income in computing his taxable income. The same difficulty is illustrated by the ownership of property. The individual who owns his own dwelling house is in the enviable position of excluding rent payment from his taxable income, yet the rental value of his house is real income just as truly as tho he paid for it. A tenant, on the other hand, actually pays for his rent out of his money income —on which he pays a tax. His income is less than that of the other by the amount of this rent, but his tax is not reduced on that account. Sufficient has been said to demonstrate that in spite of care in formulating an income tax law, the result must be far from a perfect measurement of ability to pay. Difficulties other than those of definition will be met with in the following paragraphs. While the income tax may serve as the core of a tax system, the gaps must be filled in by other taxes.

Forms of Income Tax.—All income tax laws are not the same in form, for in many aspects several alternatives are open. In the first place, the tax may be based on individuals or on the source of the income. The first type is levied on the total income of the taxpayer as a whole, while the second type is one levied on sources of income, wages, interest, dividends, etc., regardless of the persons receiving it. When it is paid at the source of the income rather than by the individual receiving it, it is known as a "stoppage at the source" form of tax. The disadvantage of the stoppage at the source method of taxation is that it eliminates the possibility of progressive taxation. To make a tax progressive we must know the individual's income as a whole. This method has the advantage, however, of reducing the possibility of evasion, and permitting different rates to be levied against different kinds of income. A personal tax depends for its administration on the honesty of the taxpayer in declaring the amount of his *total* income, and the possibilities of evasion thru false reporting are great. Nevertheless it is a personal tax that most persons have in mind when they speak of the inherent justice of the income tax, for progressive taxation may then be utilized. The personal form of income tax has been made use of in the United States, while the stoppage at the source method has been quite generally employed in England, altho recently some exceptions have been made there.

Secondly, income taxes may also be distinguished as to whether they are levied on *use value* or on *realized value*. To illustrate, if use value is accepted, the owner of a dwelling house occupying the property himself would be compelled to pay a tax on the use value of the house to him, while on the realized value basis only the receipt of actual money rents would be taxed as income. The use value basis is employed to some extent in England, but not in the United States.

Thirdly, the tax may be on *net income* or on *gross income*. The usual practice is to accept net income as the basis. This requires permission to exempt certain forms of income and to deduct certain items (such as business expenses) in order to arrive at net income. It is this phase of income taxation that makes the law appear so complex to the average taxpayer.

Finally, income taxes may be levied on actual persons, on corporations, or on both. The difficulties encountered where both forms are used will be discussed below.

The Federal Personal Income Tax.—Utilization of the income tax as a permanent and important part of the federal tax machinery began with the ratification of the Sixteenth Amendment to the federal Constitution in 1913. Previous experience with federal income taxation takes us back to the period of the Civil War. During that struggle and the reconstruction period that followed, Congress passed a series of income tax laws to meet the extraordinary drain on the federal treasury. With the expiration of the last act of this series in 1873, the use of the income tax was abandoned for a period of twenty years. In 1894 a new law was passed, but a decision of the Supreme Court of the United States that the law was unconstitutional, in that it was a direct tax not levied in proportion to the population of the several states, eliminated the possibility of all further development until the passage of the constitutional amendment referred to. The growing importance of income taxes as a source of federal revenue is indicated by the table on the following page, which shows the yield annually secured.

The income tax law of 1938 will serve to illustrate the nature of this tax legislation. The basis of the tax is the net income of the taxpayer. Net income is determined by deducting from gross income various items classified as exemptions, deductions, and credits. Exemptions include specified forms of income such as bequests, gifts received, proceeds of insurance policies, interest on state and local government bonds, and salaries paid to officials and employees of state and local governments. Deductions include business expenses, gifts made for charitable, educational or literary purposes (if they do not exceed a specified sum), and taxes, other than income taxes, paid during the year. Credits include such items as personal exemption and exemptions for dependents. Single persons earning $1,000

a year or less and married persons earning $2,500 a year or less pay no tax. Taxpayers with incomes above these limits are permitted to deduct that

FEDERAL INCOME TAX YIELD,[1] 1913-1935

(ON THE BASIS OF RETURNS FILED. IN THOUSANDS OF DOLLARS)

Year	*Personal income tax*	*Corporation income tax*	*Totals*
1913	$ 28,254	$ 43,128	$ 71,382
1917	691,493	2,142,446	2,833,939
1920	1,075,054	1,625,235	2,700,289
1924	704,265	881,550	1,585,815
1928	1,164,254	1,184,142	2,348,396
1932	329,962	285,576	615,538
1935	654,116	707,886	1,362,002

sum as personal exemption from their taxable income. Taxpayers who have children under eighteen or other persons dependent upon them for support are permitted a deduction of $400 for each such dependent. The law also permits a 10 per cent deduction on *earned* as distinguished from *unearned income*. The idea behind this provision is that income in the form of salaries or wages should be given a lower rate of taxation than incomes secured from such sources as interest on bonds and dividends on stock. However, the law applies this principle very crudely. All net income up to $3,000 is assumed to be earned, regardless of the source, and the maximum amount of income that can be claimed as earned is $14,000. The provision therefore amounts to a rebate on small incomes.

The rate of tax is a combination of what are called normal taxes and surtaxes. The normal tax is a flat rate of 4 per cent on the entire net income. The surtax is an additional progressive tax which starts at 4 per cent on all net incomes over $4,000 but not exceeding $6,000, and increases by gradual steps to a maximum of 75 per cent on that part of the net income over $5,000,000. It will be noted that these surtax rates apply only within certain limits or brackets. Thus, a person with a net income of $5,500,000 does not pay 75 per cent of the whole amount, but 75 per cent only on $500,000—that is, the excess above $5,000,000. Income tax returns are declared to be public documents under specified conditions.

Defects of the Federal Personal Income Tax.—A detailed analysis of the income tax law is not pertinent here, but two important defects should be noted in passing. In the first place, the existing practice of self-assessment is a questionable one. Each taxpayer declares under oath the facts as to his income, and unless the tax collector has

[1] Commissioner of Internal Revenue, *Statistics of Income*, Washington, Government Printing Office (1933), pp. 39 and 47. Data for 1935 taken from *Statistics of Income* (1935), *Preliminary Report*. War profits tax and 1933 excess-profits tax returns are included in the figures.

reasons to doubt the correctness of the declaration, no further assessment procedure takes place. This permits the making of incorrect returns. The difficulty has been partly corrected by the introduction of the principle of "information at the source." Corporations and individual employers are required to report the dividends, interest, salaries, etc., which they pay out. The facts so obtained are used as a check on the income receiver's veracity. But this is hardly sufficient. Some method of assessment by impartial appraisers should be adopted, for otherwise the tax may in time degenerate into a tax on honesty. In the second place, some provision should be made for scientific classification of the forms in which income accrues. In England, for example, various forms of property (such as real estate) and income (such as wages, interest and dividends) are classified under five schedules, lettered A to E. This permits differentiation in treatment and rate, and at the same time it enables assessment by impartial assessors for certain forms of income. The adoption of a system of schedules would simplify the form of our tax law and would make it possible to place the deduction for earned incomes on a sane basis. It would also prevent the offsetting of capital losses against income received from other sources, and eliminate thereby the unfortunate situation which made it possible for many of our richest citizens to avoid paying any income tax whatever during the depression years of 1931 and 1932.[2] Many other improvements would be made possible with scientific classification.

The Federal Corporation Income Tax.—Federal corporation income taxation really began with the enactment of the income tax law of 1913. Previously, an experiment in this direction had been tried, known as the Corporation Excise Tax of 1909. This law levied an excise tax against corporations, the amount of the tax to be determined by the net income or profits of taxable corporations. This tax yielded approximately $32,000,000 annually. With the passage of the Income Tax Law of 1913 the corporation excise tax was abandoned, and the taxation of corporation incomes was included in the general income tax. The rate of tax was gradually increased as the tax developed until 1917, in which year an excess profits tax was superimposed on the income tax in order to secure revenue for the conduct of the war. The revenue act of 1917 was superseded a few months later by the War Revenue Act of the same year, which increased the rates of taxation and also extended the excess profits tax to cover individuals and partnerships as well as corporations. The huge yield of these taxes is shown in the table already presented on page 519. The growth in the receipts up to and including the year 1916 was gradual, but the war increased the yield twentyfold. This was due not only to the higher rates of taxation, but also to the combined influences of war profits and the

[2] See *Congressional Hearings, Senate Committee on Stock Exchange Practices, 73d Congress, 1st Session, S. Res. 84.*

general rise in prices. The great drop in the yield for 1932 is attributable primarily to the business depression that began in the fall of 1929. This depression cut drastically the earnings of corporations. Under the Revenue Act of 1935, net incomes of corporations were subjected to a graduated rate from 12½ per cent on net incomes not in excess of $2,000 to 15 per cent on net incomes over $40,000. This rate was reduced in the lower bracket in 1936, but the reduction was more than counterbalanced by the addition of a new surtax, to be discussed in the next section.

While the extension of the principle of income taxation to cover corporate incomes has proved fruitful of revenue, it is of very doubtful merit. A corporation is not a real person but an artificial being created by the state. It is an association of individuals called stockholders, operating as a single unit. A corporation cannot really be said to have an income independent and distinct from that of its stockholders, except when viewed superficially or as a legal entity. To tax the income of a corporation when earned, and then tax it again when it reaches the hands of the stockholders as dividends, is quite obviously double taxation. In cases of holding companies, where the earnings of the operating company are passed on thru a series of stockholders to the possessors of the final layer of securities, double taxation expands into multiple taxation. A corporation income tax also defies the principle of justice, that the burden of a tax should be distributed on the basis of the taxpayer's ability to pay. This is because there is no necessary relation between the size of a corporation's income and the size of the incomes of the persons to whom its earnings are distributed. To illustrate, corporation A may have an annual net income of $1,000,000 which is distributed among only 200 persons, the stock being very closely held. On the other hand, corporation B may have an annual net income of $10,000,000, to be distributed among 10,000 stockholders. Quite clearly the ability of the stockholders to pay taxes in these cases is not properly indicated by the net earnings of the two corporations. Should progressive rates of taxation be used, the injustice is aggravated. In England this difficulty is partly avoided by rebating to the stockholder the difference between the tax paid by the corporation and what he as an individual would have paid, if the latter is less than the former. In this country the general practice has been to permit the individual paying his personal income tax to deduct from his income taxable at the normal rate, all corporate dividends on which the corporation tax has already been paid. In 1936, however, the Revenue Act subjected dividends received to the normal income tax for the first time in the history of federal income tax legislation. Finally, the difficulties of administering a corporation income tax are very serious. How are we to determine just what the net income of a corporation is? The complexity of this problem grows out of the difficulties of valuation already pointed out in Chapter XIII. Lack of uniform account-

ing practice makes the adjustment of an equal burden among the various business enterprizes for tax purposes almost impossible, without a staff of inspectors that would be most costly to maintain. Evasion of the tax is relatively simple thru the padding of depreciation accounts, salaries, and similar items. A corporation that keeps its books in an honest manner in conformity with good accounting practice pays the penalty of a higher tax than its less scrupulous competitors.

The Undistributed Profits Tax.—The Undistributed Profits Tax of 1936 was an innovation in the taxing of corporations which caused a great deal of discussion. In the Revenue Act of that date there were provided two types of taxes on corporation incomes: a graduated normal tax on net income, and a graduated surtax on *undistributed* net income. The normal tax placed a levy of eight per cent on net incomes of corporations not in excess of $2,000, up to fifteen per cent on net incomes over $40,000. The undistributed profits tax was imposed annually on that part of the corporation's net income (after deducting the normal corporation tax payable) that was not paid out, in the year in which it was earned, in dividends which were immediately taxable in the hands of stockholders. The rates were graduated from seven per cent when the amount undistributed was not over ten per cent of the adjusted net income, to twenty-seven per cent of the undistributed net income in excess of sixty per cent of the adjusted net income.

It has been said that "no tax measure in recent years has been more generally misunderstood, and few have stirred more widespread and heated discussion"[3] than the undistributed profits tax.

The proponents of this very much debated tax had two particular objectives in mind to be accomplished: (1) forcing wealthy stockholders to pay the surtaxes on income which they had hitherto been avoiding by allowing their earnings to remain in the corporation; (2) stimulating and, to a degree, regulating the economy. As to the first objective it was generally agreed that the tax would be reasonably successful, but some authorities have suggested that other devices might be used to prevent tax evasion without the undesired economic effects of the undistributed profits tax. The second objective proved more controversial. Proponents of the tax believed that the taxation of undistributed earnings of corporations would stimulate dividend distributions and thereby mitigate the dangers of overinvestment; corporate surplus additions would follow a policy of investment needs rather than a policy of tax evasion. Critics retaliated, however, with the arguments that if corporations were not allowed to build up reserves in good times to be used in bad times bankruptcies would be more widespread in depression and purchasing power would be maldistributed. Furthermore, it was contended that if young corporations were not allowed to "plow back" their

[3] Twentieth Century Fund, *Facing the Tax Problem* (1937), p. 463.

earnings, their growth would be halted. Finally, opponents of the tax maintained that it would cripple the middle-sized corporations which were too large to persuade their stockholders to reinvest dividends and too small to market new securities economically. A conclusive case cannot be made for either side of the controversy, but the importance of the objectives has led many tax authorities to regret the failure to give the tax a reasonable period of fair trial.

On account of the vigorous objections to the undistributed profits tax, in the Revenue Act of 1938 it was virtually eliminated. In its place, an entirely new corporation income tax was substituted. Corporations, by the Act of 1938, are classified according to the amount of their net incomes. For corporations with net incomes over $25,000, a *tentative* tax of 19 per cent is computed on the adjusted net income, that is, net income less credit allowed for interest on obligations of the United States Government, or of corporations organized under act of Congress. The actual tax levied is determined by subtracting from the tentative tax amount the sum of certain credits allowed on dividends received from domestic corporations, and credits allowed on dividends paid out during the year, carry-overs, deficits and funds to retire indebtedness. The latter credits are not to exceed two and one-half per cent of the adjusted net income. For corporations with just *slightly* more than $25,000 net income per year, there was provided a complicated alternative tax, to be applicable only when it resulted in a smaller tax liability than if computed by the method just described above. Corporations with a net income of not more than $25,000 are to be taxed on their adjusted net income from twelve and one-half per cent if the adjusted net income is not in excess of $5,000, up to $2,725 on net incomes of $20,000 and sixteen per cent additional on any part over $20,000.

The Act of 1938 retained to a slight degree the principle of granting lower taxes to corporations distributing their incomes as dividends, but the concession is very insignificant when compared with the replaced undistributed profits tax.

The Tax on Capital Stock and Excess Profits.—In 1934, a tax was imposed upon every corporation equal to one dollar for every thousand dollars of the adjusted declared value of its capital stock. The next year the rate was increased to one dollar and forty cents per one thousand, but in 1936 it was reduced again to its present level of one dollar. To prevent declarations of stock value from being unduly low, an excess profits tax was also passed, which imposed a five per cent levy on that part of a corporation's net income in excess of twelve and one-half per cent of the adjusted declared value of its capital stock. In 1935 this was made more stringent by raising the tax to six per cent of the corporation's net income in excess of ten per cent and not in excess of fifteen per cent of the adjusted declared value of its capital stock, plus twelve per cent of the corporation's net income in excess

of fifteen per cent of the adjusted declared value of its capital stock. The 1938 Revenue Act provides for an adjustment of the declared value of capital stock, beginning with the year ending June, 1938 and each third year thereafter.

The Federal Estates Tax.—Since 1916 the federal government has collected a tax on the transfer of decedent's estates, which tax has become important in the revenue system, as the accompanying data show.[4] Taxes levied on the transfer of property at the death of the owner, popularly called

FEDERAL ESTATES TAX YIELD

Year	*Yield*
1917	$ 6,076,575
1919	82,029,983
1921	154,043,260
1923	126,705,206
1925	108,939,895[5]
1927	100,339,852
1929	61,897,141
1931	48,078,327
1933	47,400,000
1935	140,400,000
1937	281,600,000

inheritance taxes, may be either of two sorts, (1) taxes on the total estate before transfer to the heirs, or (2) taxes on the shares inherited by each of the individuals to whom a bequest has been made. The federal estates tax falls within the first of these classifications. Under the Revenue Act of 1935, all estate tax rates were increased. The rate is graduated from two per cent on net estates not in excess of $10,000 (after allowing an exemption of $40,000) to seventy per cent on that part of estates in excess of $50,000,000. As in the case of the income tax, each of the ascending progressive rates applies only to the amount within the individual brackets. The deduction of state inheritance taxes paid is allowed up to 80 per cent of the federal tax that would have been payable if the old rates of the Act of 1926 were still in force. This awkward provision gives the taxpayer the same privilege of deducting state inheritance taxes as before, without extending the privilege to the increase in rates levied in the new law. Other deductions include funeral and other expenses, and special bequests for charitable, educational, and religious purposes. While, for all practical purposes, the federal estates tax is a direct tax on the heirs, the tax has been upheld as constitutional on the rather dubious assumption that it is an indirect tax levied on the estate *before* it is transferred.

[4] *Report of Treasury of the United States* (1931 and 1937).

[5] Including gift tax levied under the Act of 1924. Beginning in 1933 there has been a gift tax yield, not shown in these figures.

The Case for the Inheritance Tax.—No other form of taxation ever devized has secured the unanimous support accorded the inheritance tax by authorities on public finance. It is defended on general social and economic, as well as fiscal grounds. One reason why this tax is held to be socially desirable is that it checks the tendency towards increasing inequality of wealth, as was shown in Chapter XXII. The perpetuation of large estates from generation to generation is restricted. Moreover, it protects children from the misguided affection of their parents. The receipt of a large fortune often tends to deaden one's talents and energies. This argument was most vigorously advanced by the late Andrew Carnegie, a valiant defender of heavy inheritance taxation. Again, the state is to be viewed as a partner in the accumulation of every fortune. No man, regardless of his individual greatness, can become rich and successful on a desert island. The educational training one secures, the business associates with whom one works, the protection of the government under which one lives, the support of closely allied industries, the use of the monetary and banking systems, and similar factors, all contribute to the accumulation of riches. Society is thus a participant in the making of individual wealth and can justly claim a share in every decedent's estate. The fiscal arguments in favor of the inheritance tax relate to its merits as a revenue producer. The tax conforms to all the principles of a good tax administratively. It is certain in time and manner of payment, convenient of payment, and cheap to collect. It conforms splendidly with the ability to pay principle, for there is no time in one's life when one is in a better position to pay a heavy tax cheerfully than when he receives a pure windfall in the form of an unearned inheritance. Finally, as stated above, the tax yields a large revenue.

In answer to these arguments, the critic of inheritance taxation claims that both socially and fiscally the tax is of questionable value. Looking at the social aspects, it is asserted that the natural right of private property is infringed by the tax, and that a tendency to dissipate the capital of a nation results, because people will tend to be less thrifty and save less if they know that their estate is to be taxed heavily on their death. It is said to be faulty from a fiscal point of view, in that: (1) the tax is easily evaded by the transfer of property before death; (2) it falls unequally on different accumulations, for it is based on the arbitrary act of transfer, and one estate might change hands several times while another estate is transferred but once; and (3) the yield is very irregular, while the needs of the government for revenue are regular. These arguments against inheritance taxes are very weak. We no longer allow the appeal to so-called "natural" rights to interfere with the welfare of the state.[6] The tendency

[6] See *supra,* Chap. XXII, for a discussion of natural rights as related to the ethics of inheritance.

to discourage thrift is probably greatly exaggerated, for the desire to pass on a large estate to one's heirs is only *one* of many strong incentives that lead men to amass wealth. Bachelors seem to seek riches with as much effort as do married men with dependents! In fact, it may well be that the existence of the inheritance tax will induce some people to accumulate more money than they otherwise would, since they know that their estate will be reduced somewhat when it is transferred to their heirs. The difficulty of evasion can be reduced by the placing of a tax on gifts equal in rate to the tax on inheritances. At present, the rate of the gifts tax is equal to three-quarters of the estates tax. Moreover, one may well doubt whether the policy of giving away one's fortune in anticipation of death will ever be generally adopted. The average person does not contemplate death in the immediate future. The apparent inequality of treatment growing out of the difference in the number of times various estates change hands results from failure to remember that the tax falls on the *person receiving a bequest,* not on an inanimate entity, an estate. No one *person* is taxed more often than another. The irregularity of the yield would be serious if the inheritance tax were the only tax, but since it is simply a part of a large, intricate system, this objection loses much of its force.

Model Inheritance Taxation.—The exact form which a model inheritance tax should take depends on whether the purpose is purely fiscal, or social and fiscal combined. If the desire is solely to tap a lucrative source of revenue, then a general progressive tax on the estate as a whole, such as in the case of the federal estates tax, is the simplest method to be followed. An estates tax does not conform, however, to the ability to pay principle, because it does not take into account the number or wealth of the heirs receiving the estate. Therefore, if social and economic ends are sought, the tax should be based on each individual's share of the inheritance. This would tend to encourage the breaking up of large fortunes. The rate of tax should be progressive as to both the size of the inheritance and the distance of the relationship. Direct heirs should be taxed at lower rates than collateral heirs. Small estates should be exempt. In many ways inheritance taxation is more adaptable to state than federal use; wills must be probated and estates settled in the state courts. There is much to be said in favor of having the federal government give up to the states this source of public revenues.

The Federal Gift Tax.—The Revenue Act of 1932 levied a tax upon gifts, replacing a similar tax of 1924. In 1935 the rates levied were materially increased. The gift tax is intended to supplement the federal estates tax by preventing evasion thru the making of gifts in contemplation of death. Aggregate gifts above \$40,000 (if the excess is not less than \$5,000) are taxed at progressive rates equal to three-quarters of the estate tax rates. The rate is graduated from one and one-half per cent up to a limit of 52½ per cent on

that part of net gifts in excess of $50,000,000. The rate is unique, however, in that it is cumulative, so that a donor progressively ascends into the higher rate brackets as he continues to make gifts. Evasion of the gift tax is more easily accomplished than in the case of the estates tax, since the equivalent of the requirement that wills must be probated does not exist. Otherwise, what has been said for and against the estates tax applies to the gift tax.

The Proposed Federal Sales Tax.—Critics of our present tax system have suggested as an alternative, especially for the income tax, a general tax on all sales at a uniform rate of, perhaps, 1 per cent. Such a tax would really constitute a universal excise tax. The arguments in favor of this tax are that it is simple of operation; that the burden is slight, because it is paid in small amounts; that it is not class legislation, but affects all persons; and that it would yield a very large revenue. The defects of the sales tax, however, far outweigh the advantages. It ignores completely the principle of ability to pay, for it is based on the taxpayer's expenditures, rather than his wealth or income, and it is not progressive. The burden of it falls unequally on different industries. If the tax is levied on *every* sale, then a commodity, the manufacture of which requires the raw material and semi-finished product to pass thru the hands of many enterprizes, would bear a much higher total tax than a commodity which, in the course of its production, passes thru very few hands. The integrated industry would have a great advantage over the non-integrated industry. To avoid this difficulty, some writers have suggested that the sales tax be levied only once for each commodity, and just before it passes into the ultimate consumer's hands. However, the tax is seldom proposed in this form. The sales tax has been made use of in the Philippines, France, Canada, and in several states in this country. Very few tax authorities are in favor of it. Since taxpayers who receive small incomes spend a much greater percentage of their total income for consumption goods, than is the case of taxpayers with large incomes, the burden of the tax falls heavily on the poor. In practice the tax is regressive.

B. State and Local Revenue

The Sources of State and Local Revenue.—The chief source of state and local revenue is the taxation of real and personal property. The proportion of the total revenue received from this source has been rapidly declining for states with the introduction of new sources of income; but for local governments (cities, counties and school districts) the property tax remains for all practical purposes the essential source of revenue. State governments are increasingly relying upon the taxation of motor fuel and vehicles, sales, corporations, liquor, income and inheritance. The most significant changes in local sources of revenue have been the development of direct grants-in-aid by the federal and state governments to local units and the increasing importance of the earnings of public enterprizes as a by-product

of the trend towards municipal ownership. In 1935 about thirty-four per cent of all local units' revenues were received as grants-in-aid.[7] Of this total, twenty-four per cent was received from the federal government and twelve per cent from the states. The federal allotments were for local welfare projects.

Revenues from Public Enterprize.—The conduct and operation of industry is usually left to private persons, but, as we shall learn in Chapter XXVI, there are exceptions to this rule. Governments own property, and in a few cases they enter actively into commercial business. Medieval monarchs depended almost entirely upon public property and public enterprizes for their revenue, but the Industrial Revolution and its accompanying policy of non-interference with industry forced governments to devize new sources of income.

The federal government of the United States received its first great experience in public enterprize as owner of the vast public domain. While considerable revenue was obtained, the story of the administration of the various land acts is not a happy page in our history. Today the federal government owns such property as the Panama Canal, the Post Office System, The Tennessee Valley Power Development, forest reserves and a small railroad in Alaska. However, it is the municipality's entrance into the public utility field that furnishes the most important source of public revenue from public enterprize. Municipalities own docks, wharves, bridges, street car lines, water supply systems, gas and electric companies, airports and many other projects.

It is difficult to give a fair appraisal of the importance of these ventures into the economic sphere for usually objectives other than revenue are involved. Frequently the major interest is to subsidize an enterprize rather than to obtain revenue. In other cases the objective is to force down prices or rates charged by private companies. However, if the trend towards increasing governmental participation in industry continues, public enterprizes may become very important sources of revenue.

Fees.—*A fee is a charge made by a governmental agency for the performing of some service which, while socially a desirable act, at the same time confers a special benefit on the individual from whom it is collected.* The individual concerned pays the cost of rendering the service in whole or in part. For example, while it is socially desirable that all marriages be carefully recorded, at the same time a special benefit is thereby conferred upon the parties affected. The recording of their marriage gives it legal status. A fee is therefore charged for the service. Other examples are fees charged for the recording of deeds, mortgages, and contracts, and the issuing of corporation charters. The line of demarcation between fees and licenses, which are legal permits to do certain things, is sometimes very difficult to draw. In many states the distinction is a purely arbitrary

[7] *Facing the Tax Problem*, *op. cit.*, p. 379.

matter of accounting. One of the most important types of fee is the special assessment. Public improvements sometimes convey special benefits to individuals owning property near the improvements, and in some localities it is customary, under such conditions, to ask the owners to contribute towards the cost of making the improvement. When a street is built, with sidewalks, curbs, and sewers, the improvements benefit not only the city in general, but also, and more especially, the owners of property along the street. Therefore the property owners can justly be required to pay part of the cost of building it. Special assessments are becoming more common in the United States. Their use should be encouraged and extended, for where special benefits are rendered by the state to particular individuals, it is entirely proper that they should pay for them.

The General Property Tax.—One of the oldest taxes, and the one most generally relied upon by state and local governments, is the general property tax. This tax is levied on all property within the jurisdiction of the state, its amount resting upon an assessed valuation which is based upon the property's market worth. Property is divided into two kinds, real estate and personal property. Real estate includes land and improvements thereon, especially buildings. Personal property includes all forms of intangible property, such as stocks, bonds, and mortgages, as well as tangible property, such as household furniture and automobiles. The rate of tax is customarily a uniform flat or proportionate rate. Very rarely is the tax made progressive. The methods of administration differ in different sections of the United States. Usually the assessment of the property is in the hands of local assessors, and should the taxpayer object to the valuation placed on his property, he may appeal to a local board of review; and in some states he may carry his case still higher to a state board of review. The valuation made by the local assessor serves as a basis for both the state and the local tax. In some states the state authorities agree on a flat rate, for example 5 mills, which is then added to the local tax rate in every part of the state. In other states the authorities decide on the required revenue and apportion the total among the various local units, leaving each unit free to determine the local rate necessary to raise its share of the state tax burden. In origin the general property tax was an attempt to adjust the tax burden on the basis of ability to pay. The property a man owned was considered an excellent criterion of his ability to assume the tax burden, and this probably was a close approximation to the truth a century ago. Wealth at that time consisted almost entirely of land, buildings, cattle, and similar property that could not be hidden away from the eyes of the tax collector. With the development of industrialization and the accumulating mass of intangible forms of private property, the defects of the general property tax became more pronounced.

Defects of the General Property Tax.—While the general property tax is the most widely used tax in the United States, it is at the same time the most widely condemned. Professor Seligman, a foremost authority on taxation, concludes that "The general property tax as actually administered is beyond all doubt one of the worst taxes known to the civilized world. . . . The general property tax is so flagrantly inequitable that its retention can be explained only thru ignorance and inertia."[8]

The most serious defect of the tax is the inability to obtain just assessments of the value of real estate. Since the tax is based on the value of property, justice demands accurate assessment, but in practice inequality of assessment is so extensive that it borders on the ridiculous. The assessments are unequal as between individuals in a given locality and as between different sections within the same state. The local assessors are untrained men appointed for political purposes rather than ability, and the combination of ignorance and favoritism results frequently in assessments of from less than 25 per cent to more than 75 per cent of the actual market value within the boundaries of the same town. Property of great value is likely to be assessed much lower proportionately than property of small value. The effect of this is to make the tax regressive; that is, the greater the value of the property the lower the actual rate of tax paid. As between sections of a given state injustice results from the use of the same assessment (made by the local assessors) as a basis for both the state and the local tax. If the state tax is a uniform rate on all property, there is a strong inducement for local assessors to assess local property at a very low rate, in order to reduce the burden of the state tax. The local governmental unit can make up the deficit that would otherwise occur in its own revenue by raising the local tax rate in proportion to the reduced assessment.

A second defect is the impossibility of equitably enforcing a tax on personal property. Personal property, especially in the form of stocks, bonds, and mortgages, can very easily be hidden, and it is impossible for a tax collector to know just what the personal property holdings of a taxpayer may be. Reliance must be placed on a personal declaration, and this places a premium on dishonesty. The tax is widely evaded thru undervaluation of personal property and thru failure to report. In fact, in some states where a personal property tax is on the statute books the majority of the citizens not only fail to make payment but are even ignorant of its very existence. Attempts to compel a correct declaration of the value of personal property by spy systems, strong oaths, heavy penalties, and similar measures have universally failed. The taxation of personal property also brings about double taxation. The owner of real estate pays the tax on the total value thereof, and if there is a mortgage on the property, the holder of the mortgage also pays a tax on the value of it. A corporation

[8] Edwin R. A. Seligman, *Essays in Taxation* (1915), p. 62.

may be taxed on the assessed value of the real property it owns, and its stocks and bonds may be taxed as personal property in the states in which the persons holding these securities reside. This kind of double taxation grows out of a confusion of wealth with titles to wealth. A scientific law would tax one or the other, but not both.

Finally, the general property tax does not today conform to the ability to pay principle. The burden of taxation is unfairly placed on persons who own property, as contrasted with those who do not. For example, Mr. A, while not owning any property, may have an income of $10,000 a year received as a salary from a corporation by which he is employed. Mr. B, on the other hand, may have an income of only $5,000 a year, obtained, however, entirely from the renting of real estate which he owns. A then pays no property tax, while B, with less ability to pay, would be forced to pay a fairly large tax. The evasion of the tax on personal property also causes the ability to pay principle to be violated, for it means that the holders of real property pay higher taxes than the holders of an equal amount of personal property. Socially, this is especially serious, because small property owners usually hold real estate for the most part, while large property owners usually have the major portion of their holdings in the form of intangible securities.

The Reform of the General Property Tax.—While the defects of the general property tax just indicated are quite commonly admitted, government officials have been reluctant to give up the tax. The revenue obtained is steady and large and, as we have already observed, a tax on land cannot be shifted; the levying of a tax on land tends to reduce its value by an amount equal to the capitalized value of the tax, rendering the tax "burdenless" to subsequent owners. Attempts at reform of the general property tax have been largely in the direction of the classification of various kinds of property. The classification movement has made rapid progress, so that by the end of 1931, thirty-four states were permitted by their constitutions to classify property and establish differential rates; twenty had exercized this right. In fifteen states, classification has been restricted to the taxation of intangibles at a lower rate.[9] In addition to this development, many states have sought to improve the administration of the general property tax. At first, so-called state equalization boards were established for the purpose of equalizing assessments between different sections of the state, and in some states the power given these state boards was very great. There is a decided tendency towards more and more centralization of state control in the administration of the tax. One factor forcing this reform has been the growth of large business units. Corporations and railroads owning

[9] Data on classification taken from Clarence Heer, *Trends in Taxation and Public Finance*, article in *Recent Social Trends* (1933), p. 1374.

property all over the state cannot be satisfactorily valued piecemeal by each individual local authority.

If the property tax is to be retained, it should become frankly a real estate tax, and assessment should be placed in the hands of trained assessors operating under the civil service. The method of assessment should be based on a scientific system of land valuation and the land should be assessed separately from the buildings on it. If possible, the administration of assessment should be controlled by the state government. Only by such methods can justice be approximated. The separation of state and local sources of revenue might also be of assistance. The real estate tax is peculiarly adapted to the securing of revenue for the local governmental units; the state can obtain its revenue from other sources. Since the income from land is largely unearned, the tax on land, as distinguished from taxes on improvements to land, should be increased.[10] A more radical substitute for the general property tax is the Single Tax. This tax we have already discussed in Chapter XXII. It provides for a levy on land equal to the full economic rent of the land, and the elimination of all other forms of taxation.

State Inheritance Taxation.—Except in Nevada inheritance taxation is made use of thruout the United States for the purpose of securing state revenue. In form these laws vary widely from state to state. A few are estate taxes similar in construction to the federal estates tax, while others are constructed on the basis of the individual shares inherited. For direct heirs the rate of tax is usually low, but for collateral relatives, or heirs unrelated to the deceased, the rates are customarily higher and steeply progressive. Small bequests are customarily exempted, as are also bequests for charitable, educational, or religious purposes.

Since the state laws are far from uniform in construction, and since each tries to secure revenue from as broad a base as is possible, very serious conflicts of jurisdiction have resulted, causing great confusion in the settlement of estates. "In some instances, as many as twelve states have taxed the same estate."[11] Thus a state may levy against the total estate of a deceased resident regardless of where the property may be located, while other states may tax all the property within its borders regardless of whether or not the decedent lived within its boundaries. The overlapping of jurisdiction is increased almost to absurdity in the case of intangible property. Should an estate contain stock certificates, the state in which the decedent lived, the state in which the corporation concerned does its business, and the state in which the transfer office of the corporation is located, may all claim jurisdiction. Decisions of the Supreme Court of the United States

[10] For the reasoning on which this statement is based see *supra*, p. 448.

[11] Carl C. Plehn, *Introduction to Public Finance* (1926), p. 214.

have somewhat clarified the situation.[12] They provide that:—First, real estate is taxable only in the state where it is situated, regardless of the residence of the deceased. Second, tangible personal property is also taxable only in the state in which it is physically present. Third, the mere fact that a corporation is doing business or owns property within a state is not sufficient grounds for an inheritance tax on the stock of a foreign corporation owned by non-residents. There is still, however, a crying need for greater uniformity between state laws. As long as individual states are jealous of their sovereign power, progress in this direction must inevitably be slow. The deduction granted from the federal estates tax for the payment of state inheritance taxes has resulted in greater uniformity in the state laws.

Other State Taxes.—Dissatisfaction with the general property tax and the increasing need for revenue on the part of state governments has led to the use of new forms of taxation. The growth of state inheritance taxes is part of this movement. State income taxes are also increasing in number, the best-known laws being those of Massachusetts, New York, and Wisconsin. Corporation taxes of various sorts, such as incorporation and franchise taxes, capital stock taxes, taxes on the transfer of securities, and special taxes on banks and insurance companies, are gaining popularity. All of these levies against corporations are justified on the ground that the state grants special privileges by the act of incorporation and therefore has a right to make reasonable tax demands in return. A very different development is the increasing use made of excise taxes, of which the cigarette, gasoline, and anthracite coal taxes are the important illustrations. In recent years nearly half the states have experimented with the sales tax, and the trend appears to be gaining ground.[13] It is probable that in the future state governments will rely less on the general property tax than in the past. As we have stated above, there is much to be said for leaving the taxation of real estate to the local units of government.

Revision of the Tax System of the United States.—In this chapter we have had occasion to reach many conclusions regarding the improvement of specific taxes that should serve as guides in the revision of our tax system. Some of the more important of these are as follows: (1) There is a pressing need for the formulation of a workable plan to avoid the confusion of jurisdictions among federal, state, and local taxing authorities. In so far as possible, each of these divisions of our government should confine itself to separate and distinct sources of revenue. The federal government should build its tax system around the income tax, also making use of customs and excise duties. The state governments can best utilize income taxes, inheritance taxes, and various corporation and busi-

[12] *Cf. ibid.*, pp. 214–215.
[13] *Cf.* Twentieth Century Fund, *Facing the Tax Problem* (1937), p. 46.

ness taxes. The local governmental units can best rely on real estate taxes, licenses, and fees. (2) The personal federal income tax should make provisions for a scientific classification of the forms in which income accrues; assessment by impartial assessor should be worked out; and income tax returns should be public documents accessible to the proper public officials. (3) The federal income tax on corporations should be abolished and in its place substituted a progressive tax on additions to corporate surpluses. (4) An amendment should be passed to the federal Constitution permitting the federal government to tax state and local government bonds. (5) The use of state inheritance taxes should be extended; they meet all the requirements of a good tax and constitute a splendid source for state revenue. Uniformity in state inheritance taxes should be achieved, and, should this be accomplished, the federal government would do well to abandon the use of inheritance taxation. (6) The general property tax should be abandoned, and in its place substituted a real estate tax made use of only by the local governments. A system of scientific valuation of real estate should be worked out, and assessors should be appointed thru the civil service. State supervision of assessment of real estate may be necessary.

Summary

The chief sources of federal revenue prior to 1913 were customs duties and excise taxes. With the passage of the Sixteenth Amendment, the income tax became the primary source of revenue. In recent years, a federal estates tax has yielded substantial revenue. Customs duties are of questionable merit. They yield an irregular flow of income, tend to dislocate home industries every time a change in rates is made, and fail to conform to the principle of ability to pay, for the burden falls mainly on the domestic consumer. They are, however, convenient in time and manner of payment, cheap to collect, and the burden falls lightly in small payments. Excise taxes have advantages and disadvantages almost identical to customs duties. They should be levied against a small number of commodities, having a rather inelastic demand. Income is generally accepted as the best index of a citizen's ability to pay taxes. The federal income tax is assessed against the taxpayer's total net income. To find taxable net income, various items classified as exemptions, deductions, and credits, are deducted from gross income. The rate of tax is a combination of a normal tax and surtaxes. The present law should be improved by (1) a scientific classification of the forms in which income accrues, (2) assessment by impartial assessors as a supplement to present reliance upon personal declaration. The taxation of corporate income has yielded much revenue, but should be abolished. It involves double taxation, defeats the operation of the ability to pay principle, and is impractical of administration because the net income of a corporation

is difficult to ascertain. Recent corporation tax legislation has included capital stock, excess profits and undistributed profits taxes, altho the last-mentioned has been virtually eliminated. Inheritance taxes satisfy most of the requirements of a good tax. They conform to the principle of ability to pay, tend to check the perpetuation of large fortunes, and are easily administered. The federal estates tax is a progressive tax on estates rather than on individual bequests. The federal gift tax has the effect of reducing the possibility of evading inheritance tax laws. As a substitute for the present income and inheritance taxes, it has been suggested that the federal government enact a uniform tax on all sales. Such a tax, however, is generally disapproved by tax authorities because it affects different industries unequally and places an undue share of the tax burden on the consumer.

The primary sources of state revenues are motor fuel and vehicle, sales and corporation taxes. Local governmental agencies rely chiefly upon the general property tax. Income from public enterprizes is most important in the case of municipalities. Fees are charges made for the performing of some special service, which, while a socially desirable act, at the same time confers a special benefit on the citizen. Fees for the recording of marriages, mortgages, and deeds will serve as illustrations. The general property tax is considered one of the worst taxes in the United States today. The major defects are: the inequality of assessments of property values, the evasion of the tax on personal property, and the lack of conformity with the ability to pay principle due to the fact that an unfair burden is placed on those who own property. To reform the tax, the personal property portion should be abandoned, a scientific method of land valuation should be devized, and the assessing of property values should be placed in the hands of trained assessors. There is much to be said for increasing taxes on land and lowering them on improvements to the land. Dissatisfaction with the general property tax has resulted in an increased use of other forms of taxation by local units, among which are income taxes, inheritance taxes, special corporation taxes, and special excise taxes.

SUGGESTIONS FOR FURTHER READING

The general treatises on public finance referred to in the Suggestions for Further Reading appended to the last chapter have served also as a basis for this chapter. An article by Glenn E. Hoover, *The Economic Effects of Inheritance Taxes,* published in the *American Economic Review,* March 1927, gives a rather complete analysis of that problem. An interesting discussion of the operation and effects of federal income and inheritance tax laws is that of Ernest M. Patterson in his article, *Shall Taxes be Cut?* published as a supplement to *The New Republic,* November 4, 1925. Alazada Comstock's *Taxation in the Modern State* (1931) contains an excellent account of new developments in taxation abroad since the war. A thoro analysis of recent tax developments in the United States is that of Clarence Heer, *Taxation and Public Finance,* in *Recent*

Social Trends (1933), pp. 1331-1390. A report on Model State and Local Tax Systems, published in the *Proceedings of the National Tax Association,* 1919, gives the consensus of some of our best authorities as to what constitutes a scientific system of taxation. For more recent recommendations on changing our tax system, see *Facing the Tax Problem,* published by the Twentieth Century Fund (1937), Book Three. The whole field of taxation is covered in a masterly way by E. R. A. Seligman's well-known work, *Essays in Taxation* (1931 ed.). Very satisfactory chapters on the tax system of the United States will be found in the following general texts on economic principles: Sumner H. Slichter, *Modern Economic Society* (1931), Chap. XXVIII; S. H. Patterson and K. Scholz, *Economic Problems of Modern Life* (1937 ed.), Chaps. XVI and XVII.

CHAPTER XXV

THE RELATION BETWEEN GOVERNMENT AND INDUSTRY

A. The Sphere of Government

The Problem.—The determination of the most effective relation between government and business is one of the most important and at the same time most perplexing of present-day problems. Briefly, three alternative policies are open. First, the government may follow the course of non-interference, restricting its activities to the maintenance of law and order and the administration of justice, leaving industry and business severely alone. Or, it may participate directly in economic affairs, by owning and operating industries itself. Between these two extremes is the third possible policy,—that of regulation or control of industrial activity. The advantages and disadvantages of each of these policies which must be weighed in the balance are numerous and conflicting. In this chapter we shall examine the broad aspects of the economic functions of government, reserving for the next a detailed examination of the actual experience and future possibilities of government regulation and government ownership of industry.

The Economic Basis of Government.—"Of course it was absurd for men to write of the production and distribution of wealth apart from the state which defines, upholds, taxes, and regulates property—the very basis of economic operations; but absurdity does not restrain the hand of the apologist."[1] In these words Professor Charles A. Beard expresses his distrust of the modern practice of separating sharply the work of the political scientist from that of the economist. The economic and political aspects of society are not separate and distinct. Economic, political, religious, educational, ethical, and other institutions are separated for purposes of study, but there is serious danger in this practice, for each institution depends on, and considerably affects, the operation and evolution of every other institution. Our political organization, the government, not only blends with the economic organization, but in the opinion of some of the best authorities, it is based directly upon it. James Madison, the father of our federal Constitution and one of the greatest politicians and statesmen of his time, believed that the primary function of government was the protection of the different and unequal faculties of man for acquiring property.[2] At a later date in our

[1] Charles A. Beard, *The Economic Basis of Politics* (1922), p. 4.
[2] *Ibid.*, p. 29.

history, Daniel Webster expressed the opinion that the form of government is determined (except where the sword rules) by the nature and distribution of property. He believed that the republican form of government rests upon a wide distribution of property and that political disturbances in nations arise primarily from group conflicts growing out of variation in the form and distribution of property.[3] During the past century the economic aspects of government have been rapidly increasing. Not only has the government concerned itself with the protection of such rights as that of holding property, but it has taken an active part in the direction of business activity itself. Today, all the necessities of life come largely from distant sources, and we call on the government not only to keep the peace, but also to regulate the machinery of production and distribution, safeguarding it from influences that may interfere with its effective operation. If you should attend a session of the American Congress today, the chances are that the matter under discussion will have to do with such economic questions as trust regulation, railroad control, factory legislation, pure food laws, tariff duties, banking legislation, irrigation projects, or taxation. The study of government can no longer be completely divorced from the study of economics.

The Historic Background of Governmental Policy in England. —Human society is dynamic in nature. The persistence and pervasiveness of evolution or change in social institutions immediately impresses the student of every social science. The pendulum of state interference and participation in industry has swung sharply back and forth during the course of history. In that period when the guild system held sway in England, the control of industry and trade was concentrated largely in the hands of the guilds. These organizations of craftsmen supervized in great detail the actions of their individual members, as well as those of persons having business relations with them. The quality of goods, prices, output, wages, conditions of apprenticeship, and the general conduct of trade were supervized. State activity was restricted to the protection of the traveling merchant and the exercize of the power of taxation. The day of the strong central government had not yet arrived. With the development of foreign trade and the breakdown of the guild system, the power of the central government, personified in the king, increased. The wool trade was subject to royal control, and steps were taken to encourage the development of certain industries thru the importation of continental craftsmen. Gradually the central government gained in strength until, by the sixteenth century, the power of the local town and guild organizations was completely broken down, and the national government reigned supreme over industry. From the sixteenth to the nineteenth centuries the national, or mercantile, system dominated English life. The mercantile system represented an attempt on

[3] *Ibid.*, pp. 39–40.

the part of the English monarchs to increase the size and power of the nation as a whole by rigid direction of industry and trade. Foreign trade was controlled in great detail with the general purpose of increasing exports and decreasing imports so that gold would flow in, making the nation rich. Agriculture and certain industries were given material support. Prices, quality of goods, rates of wages, trade practices, and other details of industry and trade were dictated by state authority. Long lists of monopolistic privileges were extended to court favorites, seriously restricting the freedom of competition.

With the Industrial Revolution, the pendulum swung rapidly and sharply backward towards a strict non-interference policy. The famous doctrine of *laissez-faire* became the prevailing philosophy. *Laissez-faire* is a French phrase meaning "let alone," or, to translate it very freely, "hands off." According to this doctrine, the best government is that which governs least. Let industry alone for the good of the state. Extend to every individual freedom to engage in economic activity as he sees fit under the guidance of his own self-interest. Profits will be greatest where goods are most scarce and most needed. Consequently, an individual seeking profits will produce the commodity socially desired. The interests of the state and of the individual are one and the same. It was under the sway of *laissez-faire,* or the "let alone" philosophy, that English industrial growth took place. One by one the restrictive laws of the preceding period were repealed or allowed to become dead letters. Monopoly privileges were revoked, and trade was freed of hampering restrictions. The protective power of free competition was relied upon as the sole guarantee that the public welfare would not be disregarded. The duty of government was to protect the life, liberty, and property of its citizens. The only important exceptions to this non-interference policy on the part of the government were such economic activities as the construction of public works, and the coinage of money. The results were two-sided—marvelous development of material productivity on the one hand, and disregard for human factors on the other. The social evils of the transition period are known to all of us. A reaction set in, as a result of which laws providing for the protection of children and women in industry, regulation of the conditions of employment, and the like, were gradually placed on the statute books. But the doctrine of *laissez-faire* remained deeply embedded in English custom and law.

The Historic Background of Governmental Policy in the United States.—During the formative period of our country the customs, laws, and ideals of England were transplanted to American soil. Our government from the very beginning adopted the policy of *laissez-faire* in its relations with economic activity. Industry was left to the ownership and operation of private individuals under the general protection of the government. The pioneering of a new country by the persons of aggressive

type who settled our land developed self-interest and individualism to very great lengths. Up to the Civil War private economic enterprize was but little hampered by government regulation. Some assistance was given industry thru the protective tariff and special subsidies. However, the rapid industrial expansion that began just following the Civil War created new problems and gave rise to a growing demand for governmental action. Railroads spread their network of tracks over the land, and it was soon apparent that the nature of the service given and the freight rates charged determined in a large measure whether a given community would live in prosperity or in poverty. Charges of discrimination were angrily made. Industry itself was transformed, the size of the business unit increasing rapidly under the corporate form of business organization. Powerful monopolies appeared. The growing complexity of machinery resulted in an increase in the hazards of industry facing the workmen, and trade union organizations fought for legislative action as a means of protection. The factory system induced the growth of large cities. Capital and labor became more sharply divided into different economic classes, giving rise to a conflict of interests. The increasing complexity of economic life left the consuming public more and more dependent for the very necessities of existence upon producers who furnished the commodities often from a great distance and with the assistance of an elaborate and intricate marketing system. *Laissez-faire* broke down when confronted with this transformation of economic life. The new industrialization forced another wide swing in the pendulum, this time towards greater government interference in industry.

Our Form of Government.—It is not within the province of this book to discuss in detail the form of the government under which we live, but its general structure must be kept clearly in mind. The United States is a federation of forty-eight sovereign states operating under a written constitution. The local government units, such as the city, county, or town, exist only by the fiat of the state governments—they possess no independent sovereignty. There is consequently a division of powers between the individual states and the federal government. The federal government possesses only those powers expressly granted or implied in the Constitution of the United States. All residual powers remain in the hands of the state governments. This division of sovereignty gives rise to awkward problems of legislation, and a wide diversity of laws concerning the same topic exists in different sections of the nation. Thus laws controlling marriage, divorce, requirements for the incorporation of a business, factory inspection, child labor, etc., vary widely from state to state. The chief powers of the federal congress may be grouped into four classes: (1) taxation, (2) coinage, (3) regulation of foreign trade and of commerce between the several states, and (4) maintenance of the army and navy. It is the third of these powers that

furnishes the legal basis for federal regulation of business. Congress has no power over trade, commerce, or business within a state unless it involves commerce with other states. The only exception to this rule is the occasional exercize of the police power.

Our federal and state governments are organized on what has been called a system of checks and balances. Powers are distributed between three branches—the legislative, executive, and judicial, each department being specifically limited in its powers by the Constitution. The legislature enacts legislation and thru this power controls the raising and spending of governmental revenues. The executive possesses the power of approval and enforcement of legislation. The judicial branch is charged with the duty of administering justice, interpreting the laws and the Constitution when controversies arise. The efficient functioning of the government requires coöperation of all three of the departments into which it is divided. The importance of this in the study of the relation between government and business will be apparent later.

The Question of Constitutionality.—The judges of the Supreme Court of the United States have been vested with an unusual power that in one sense places them above the executive and legislative branches of the government. This is the power of deciding whether or not an act of Congress, or of a state legislature, conforms to the powers granted in the written federal Constitution. Back in 1803, Chief Justice Marshall declared in the famous case of *Marbury vs. Madison* that, since the federal Constitution was the paramount law of the land above all other legislative acts, it was the duty of the judicial department of the government to state whether or not a law was in conflict with the powers granted Congress by the Constitution. Consequently, a law may be declared void by the Supreme Court, even tho it expresses the will of the majority of the people and passes both houses of Congress with sweeping majorities. The only recourse for the public under such conditions is the long, tedious process of amending the Constitution. This gives to the judges of the Supreme Court the unusual power of stating the limits within which the regulation of business by the federal government can legally be conducted. We have already observed that the authority for federal regulation of business rests largely on the power of Congress to regulate interstate commerce. But how far does this power extend within the meaning of the Constitution? Has Congress merely the power to regulate the actual trade or movement of goods between the several states, or can it go back of that trade and control the actions of the persons engaged in it? It is clear that the control of interstate railroads comes within the powers of Congress, but what of the control of a corporation doing business in several states? The answer to such questions depends on the verdict of the majority of the justices of the United States Supreme Court. Federal control over business can move forward no

more rapidly than the Supreme Court of the United States is willing to grant constitutional authority. In the main, the Court has been liberal. Commerce has been construed broadly as intercourse, and the Court has taken the position that the powers over commerce must keep pace with the progress of the country. Since most large business enterprizes do an interstate business, they have come within the commerce-regulating powers of Congress.

The Economic Functions of Government Classified.—While the manifold functions of government are difficult to classify, for our purpose we may group them into five general classes. They are: (1) protection of the legal foundations of business enterprize—freedom of enterprize, private property, and freedom and security of contract; (2) the rendering of public aid to the conduct of private enterprize; (3) protection of the general welfare, especially health, safety, and morals, from misguided business activity; (4) the regulation of business to prevent unfair competition and grasping private monopoly; (5) public ownership of enterprizes in which private initiative has been found wanting. In Part B of this chapter we shall examine the first and second of these economic functions, and in Part C the third. We shall reserve for the next chapter an extended analysis of the fourth and fifth.

B. Government Protection and Promotion of Business Activity

Freedom of Enterprize.—With but few limitations, our government protects the right of every citizen to enter any business that he sees fit. In the words of the Supreme Court of the United States, "Among these inalienable rights, proclaimed in that great document, [the Declaration of Independence] is the right of men to pursue their happiness, by which is meant the right to pursue any lawful business or vocation, in any manner not inconsistent with the equal right of others, which may increase their prosperity or develop their faculties so as to give to them their highest enjoyment. The common business and callings of life, the ordinary trades and pursuits which are innocuous in themselves, and have been followed in all communities from time immemorial, must, therefore, be free in this country to all alike upon the same conditions."[4] The right of freedom of enterprize is an inseparable part of the policy of *laissez-faire*. It leads to one of the most striking characteristics of modern economic life,—the fierce competition between the many individuals who "pursue . . . any lawful business or vocation." To protect the freedom of enterprize it is necessary to maintain free competition, and a very elaborate code of common law has evolved to accomplish this end. We shall meet with this phase of government activity again in the next chapter.

[4] Quoted from R. J. Swenson, *National Government and Business* (1924), p. 47.

The Protection of Private Property.—The framers of the Constitution were very careful to protect the property rights of individual citizens. This protection we have observed to be one of the fundamental functions of government. The Fifth Amendment to the Constitution provides, "No person shall . . . be deprived of life, liberty, or property without due process of the law; nor shall private property be taken for public use, without compensation." The Fourteenth Amendment to the Constitution extends this prohibition to the states, providing that no state shall deprive any person of life, liberty, or property without due process of law. The phrase, "due process of law" means that the individual concerned must not be deprived of his property until he has had the opportunity to testify, present witnesses, and refute charges, before the courts of justice. Its effect is to prevent the arbitrary taking of one's property by force, or by any other means than legal sale, gift, or bequest. Even when taken by the state for public purposes, the owner must be paid for the property at its full market value.

Limitations on Private Property Rights.—The right of private property is the cornerstone of our present economic system. The wealth accumulated in the course of economic activity is the property of private individuals, and is protected as such by law. Numerous decisions have been handed down by our courts extending the concept of private property to meet the needs of changing conditions. A corporation is considered a person before the law and possesses the same property rights as a natural person. The theory most generally accepted justifying the existence of private property rights is that they advance the social welfare. The right is a privilege granted individuals for the good of the state. This being the case, it follows that society may restrict or even eliminate a property right that is found to detract from, rather than add to, the general well-being. The right is not absolute and has always been limited in many ways. The power of taxation itself constitutes such a limitation,—inheritance taxes, income taxes, and taxes on real estate are direct levies on private property. Another broad limitation is the necessity of protecting public health and morals. If the use to which an individual applies his property endangers public health or morality, restrictive action may be taken, and the owner has no legal redress. A tenement house may yield to the owner a large income, but if public health or safety is found to be endangered, the owner may be forced to abandon its use. A theatrical producer may spend thousands of dollars in producing a play, but if the censorship authorities decide that it will contaminate public morals, the play must be withdrawn regardless of the financial loss incurred. The use of property in such a manner as to injure other property-holders is generally prohibited. One cannot erect a slaughterhouse in the midst of a suburban residential community. The owner of a city lot is not permitted unreasonably to obstruct his neigh-

bors' source of light and air. And finally, the right of eminent domain limits the freedom and the privileges of property-owners. If the use of certain land is essential to the making of some public improvement, such as the building of a road or a bridge, the state can condemn and take over such property, reimbursing the private owners for their loss. Should the owners believe they are unjustly rewarded, they may carry their protest to the courts, but the right of the government to take over and use the property regardless of the desires of private owners cannot be questioned. The right of private property has been restricted in the past and can be further restricted in the future, if the protection of the general welfare requires it.

Freedom and Security of Contract.—The federal Constitution provides that "no state shall pass any law impairing the obligation of contract."[5] In addition to this protection, the courts have interpreted the constitutional protection that no person shall be deprived of liberty without due process of law, to include liberty of contract. No sections of the common law are more highly developed than those dealing with the making and enforcing of contracts. Our government, therefore, stands firmly as the protector of this legal device so essential to the functioning of modern business. Certain kinds of contracts are not enforceable before the law. This list includes contracts made under duress and contracts made by persons thought incompetent to make a bargain protecting their interests, such as minors and imbeciles. In its power over the right of contract, the government has a means of controlling business activity that has proved useful in the past. By dictating the conditions to which contracts must conform in order to be enforceable before the law, it is possible to extend government control over economic activity. Contracts in restraint of trade, for example, are non-enforceable under our federal trust-regulatory legislation. The power placed in the hands of the state to maintain freedom and security of contract must be included as one of the important economic functions of government.

Government Aids to Business.[6]—Modern governments assist business in many definite ways. Whenever it is possible for an individual or a small group of individuals to perform an economic service for profit, private business is the almost universal rule. There are many business needs, however, that by their very nature can be better satisfied by collective effort, and it is here that governmental action is useful. The extent and importance of the assistance given industry by governmental agencies is indicated by the following activities of the federal government in this direction:

(1) The safeguarding of ocean commerce. This includes the maintain-

[5] See Article 1, Section 10.

[6] Material of this paragraph adapted from R. J. Swenson, *op. cit.*, pp. 17–46.

ing of lighthouses, lightships, coast guards, buoys, quarantine and inspection service, ridding the high seas of derelicts, etc.

(2) The compilation and dissemination of business information. The activities of the Departments of Agriculture, Labor, and Commerce place them in an especially good position to obtain business information concerning the country as a whole. The publications of these departments are mines of information for both the social scientist and the business man.

(3) The issuing of patents and copyrights. The federal Constitution contains a provision giving the federal Congress the authority to encourage invention and original writing by granting protection for stated periods of time to inventors and authors.

(4) Public improvement. The widening and deepening of rivers, the development of harbors, the reclaiming of swamp lands, the irrigation of desert lands, flood control, and the building of canals, materially assist business in carrying on its activities.

(5) The Weather Bureau. The issuing of weather reports, storm warnings, flood signals, and similar information has a greater importance than the layman commonly attributes to it. For example, some products are spoiled by freezing and yet must be shipped long distances in box cars. The shipper wants to know ahead of time whether or not there is risk of a fall of temperature while the goods are in transit. The services of the weather bureau to the farmer and shipping interests are common knowledge.

(6) The Bureau of Standards. The federal Bureau of Standards is charged with the responsibility of maintaining accurate standards of weights and measures, and of late has given an increasing fraction of its time towards the analysis of the problems of industrial standardization.

(7) Research. Many of the federal departments are engaged in specific forms of research falling within their jurisdiction. Research for the purpose of eliminating agricultural pests, such as the gypsy moth, the corn borer, and the cotton boll weevil, furnishes one illustration of the importance of this type of assistance.

(8) The protective tariff. The policy of protecting industry thru tariff duties has been a part of our governmental policy almost from the beginning of our history. The enactment of this legislation has not only given considerable assistance to industry, but has incidentally established an important source of federal revenue accounting for one-half the total revenue of the federal government at the outbreak of the World War. Our previous discussion of this problem, however, indicates that the general policy of tariff protection is of doubtful benefit to the nation.

(9) National administration of currency and finance. The scope of this phase of government activity has already been indicated in previous chapters.

It will be noticed that the foregoing activities are *helpful* rather than

restrictive in nature, and consequently they are seldom thought of as departures from the policy of *laissez-faire*. Nevertheless, they increase the dependence of business on the government and weave the strand of government more closely into the fabric of economic life. The list of government aids to business is continually growing. The activity of the federal government in aiding agriculture is outstanding.[7] The Federal Farm Board Act of 1929 encouraged the formation of Agricultural Coöperatives and set up administrative machinery to attempt the control of the prices of farm products. The Agricultural Adjustment Act of 1933 and the Farm Act of 1938, while restrictive in some respects, were designed primarily as aids to farmers. The exigencies of depression resulted in many other new aids to industry, banking, and agriculture, among them the Reconstruction Finance Corporation (1932), the Tennessee Valley Development Act (1933), the Federal Deposit Insurance Corporation (1933), the Farmers' Home Corporation (1937). This expansion of activity may be temporary, but it is certain to leave its mark upon the future functioning of the federal government.

C. Protection of the General Welfare: Labor Legislation

The Police Power.—By judicial interpretation, our government has been given authority (not specified in the Constitution) to protect the health, morals, safety and general welfare of its citizens, which is known as the *police power*. It is primarily vested in and used by the state governments, but the courts have decided that similar power is possessed by the federal government in respect to those activities over which the Constitution gives it specific control. The exercize of the police power comes in direct conflict with those clauses of the federal Constitution guaranteeing individual liberty and private property, for the exercize of the power inevitably affects the personal and property rights of certain citizens. The condemnation of a factory building, on the ground that it is unsafe and a public menace, is equivalent to confiscation, for the owner of the building suffers a serious financial loss. The police power is society's protection against abuse of the constitutional rights of individuals. Just how far the state and federal governments may limit or alter the individual rights of liberty and property depends on the willingness of the courts to extend the scope of the police power. Fortunately, the courts have been willing to expand the scope as, in their opinion, changing conditions seem to warrant. The general rule followed seems to be that the use of the power will be declared constitutional whenever the acts of the legislative bodies in question are considered reasonable and necessary.

The importance of the police power for our problem of the relations between government and business cannot be overestimated. It is the author-

[7] See Chapter XIX, *The Plight of Agriculture*.

ity for a considerable portion of the economic and social legislation that has been enacted. Examples of the use of the power by state governments are such laws as those relating to compulsory education, continuation schools, public health and sanitation, factory inspection, the use of safety appliances, building inspection, and the control of intrastate common carriers. Typical of the federal government's use of the power are federal laws compelling the use of railroad safety devices, maintaining the purity of foods and drugs, suppressing the white-slave traffic, inspecting meats, regulating the manufacture of phosphorous matches, and the fixing of warehouse and grain standards. If government interference in industry is to be further developed, the police power will have to be expanded to give the required authority and avoid unconstitutional procedure. The power placed in the hands of the Supreme Court of the United States to guide this development is almost unlimited. While many critics believe the jurists should adopt a more progressive policy than has been followed in the past, there is much to be said for the exercize of caution before new extensions of the police power are made. Its unrestricted use would have the effect of completely nullifying the protective sections of the Constitution.

Reasons for Labor Legislation.—From the viewpoint of the student of economics the most important exercize of the police power in the interests of the general welfare is that of labor legislation. Experience with *laissez-faire* early taught the lesson that the worker was unable to protect himself without assistance under the new conditions of industry. Unscrupulous employers were left free to tyrannize their employees, and the hazards of industry were multiplied as the development of the machine process progressed. Labor legislation, taken broadly, includes all legislation passed to protect the worker in industry from abuses over which he has little or no control. It includes primarily the various forms of social insurance already discussed in a previous chapter, and legislative control over the general conditions of employment. Children in industry are protected on the grounds that they are unorganized and cannot bargain successfully on a plane of equality with their employers, and that the welfare of the nation demands that its future citizens have healthy minds and bodies. Women are protected for similar reasons. They are usually unorganized, and the maintenance of their good health is a question of national concern, because they are the mothers of the next generation. The effects on home life which result from the employment of women in industry, and the dangers of the period of maternity, also contribute towards the formulation of the attitude taken by the courts, that women must be considered, in part, as wards of the state. As to the men, the courts have been reluctant to permit legislative control over the conditions of their labor, fearing that the constitutional right of individual liberty

and freedom of contract might be unduly interfered with, giving rise to a paternalistic system of government. Abroad, legislative protection of men in industry is much more common and rapidly gaining ground.

The enactment of labor legislation not only protects the worker but it also protects employers with high social standards from the unfair competition and low standards of their less public-spirited competitors. A textile manufacturer may honestly desire to maintain working conditions in his plant at a very high level, but the imperative demands of competition may force him to abandon his ideal in practice. The morality of the enterprizer with the lowest standards tends to become the standard of the group. Labor legislation controlling conditions of employment has the effect of equalizing somewhat the competition between business enterprizers.

The Question of Jurisdiction.—The progress of labor legislation in the United States has been handicapped by the fact that the power to enact such legislation falls within the jurisdiction of the state governments. The result is that there is little uniformity in the laws enacted in different states. There are as many different laws as there are states in the Union. In some states a very high standard is maintained, while in others the standards are astonishingly low. Decisions of state supreme courts have added to the confusion by failing to agree on the constitutionality of certain types of labor legislation. This divergence in the laws retards the raising of standards in all states. The opponents to new improved legislation assert that business will be driven out of the state into other states having less strict requirements. The latter states oppose all attempts to improve their own laws by asserting that business will be hurt by such action. Prosperity purchased at the price of maintaining archaic labor conditions detracts from, rather than adds to, economic welfare.

Sweat-shop Control.—In many industries, where division of labor has been carried to great length and only simple machinery is required, the sweat-shop system has come into existence. The irregularity of the demand for products of a seasonal nature has also contributed towards its growth. The system is one in which the employees—usually of an ignorant type—are both overworked and underpaid. In the large industrial centers very old persons, women, and children (especially from immigrant families) are employed at simple tasks for long hours under unsanitary conditions at extremely small rates of pay. The work is either taken home in small bundles to be finished, or it is given out in larger quantities to contractors who operate small shops in tenement or dwelling houses. Frequently all the members of a family engage in the work, using the rooms in which they live and sleep as a workshop. The sweating system of labor is practiced most commonly in the manufacture of ready-made clothing, especially neckties and underwear, in the manufacture of cigars, and in the making

of artificial flowers. Some of the tasks, such as covering buttons with cloth, attaching buttons to cards, boxing small objects, and shelling nuts, can be turned over successfully to very small children.

The work of the sweat-shop is difficult to regulate, since it takes place in the homes of the workers. In the United States a system of licensing these shops has been tried. Contractors are required to obtain licenses for their premises, and the issue of the license depends on the fulfillment of all sanitary and healthful regulations. Constant inspection by government agents is necessary under this system. Contractors permitting work to be done in unlicensed premises are themselves held responsible. The weakness of the licensing system is that only conditions of employment are regulated; the broader questions of low wages and long hours remain untouched. The Amalgamated Clothing Workers and the International Ladies Garment Workers have succeeded in eradicating to some extent the sweat-shop system in the clothing trade, by writing into the trade agreement with their employers prohibitions against work being done in the homes of the workers. The recent restriction of immigration will also, no doubt, reduce the evils of sweating, for the system feeds on ignorance and willingness to accept very low standards of living.

Minimum Wage Laws.—One of the outgrowths of the sweating system has been the adoption of minimum wage legislation. The purpose of a minimum wage law is not to control or determine wages in general,[8] but to prohibit the employment of a person at a wage below an amount necessary to maintain a minimum standard of living. These laws either state definitely the wage considered a minimum or they leave the determination of that wage to an administrative commission. The latter plan is by far the best, because changing economic conditions, such as variations in the price level, make it necessary to vary the wage rate frequently, if the intent of the law, just to cover minimum living costs, is to be carried out.

Economists are not in agreement as to the merits and advisability of minimum wage laws. The case for the minimum wage legislation may be summarized in four general arguments. In the first place, such laws prevent unscrupulous employers from exploiting ignorant persons who possess very little bargaining power. Secondly, the competition of the lower strata of workers with the upper grades is eliminated, thus tending to prevent the depressing of wages. In the third place, the productivity of industry is increased by forcing employers to use the most efficient production methods and the most modern equipment in order to enable employees to earn the living wage. At the same time the worker is stimulated to increase his efficiency in order to hold his job. Finally, employers with higher standards are protected against underselling by competitors with low

[8] In this connection compare the argument of Chap. XXII, Section C.

standards. Critics of the minimum wage assert that it is impossible for a group of men to control the wages of labor by law. Wages depend on the supply and demand of labor, and can never be greater than the productivity of the individual workers concerned. It is also asserted that the burden placed on society will be heavy, for persons unable to earn the living wage will not be employed at all and will consequently become charges of the state; the earning of a small wage is preferable to idleness. There are no fundamental theoretical difficulties with minimum wage laws, provided they are intelligently framed and applied. It is perfectly feasible to fix a minimum wage and forbid employment below that figure. Some industries that cannot profitably pay the wage fixed may be forced out of business, perhaps, but if they cannot pay a living wage they had better be dispensed with; they are industrial parasites. Industries that can pay a living wage should, if necessary, be forced to do so. The difficulties to be encountered are rather those of practical operation. The complexity of the wage system in modern industry makes the problem of administration serious. However, if the wage limit is fixed at the very lowest minimum, the risk is slight.

Experience with Minimum Wage Legislation.—The first real experiment with minimum wage legislation was that of the state of Victoria in Australia. This plan, adopted in 1896 and directed against sweated industries, provided for the establishment of wage boards charged with the duty of fixing wages and other specified conditions of employment. The Act was broadened until practically all industries were brought within its scope, and it has spread to other sections of Australasia. In 1909 the British Parliament adopted a similar act, also directed against sweated industries, and the jurisdiction of wage boards has been increased until it includes a large number of industries employing several million wage-earners. Other European countries have made little use of minimum wage laws, beyond attempts to control sweated industries.

In the United States minimum wage laws have been restricted almost entirely to women workers and sweated industries. The first state law was that passed in Massachusetts in 1912. This act, however, did not confer mandatory powers, but depended largely on public opinion for its enforcement. Other states followed suit during the next decade, and in 1918 Congress enacted a law for the industries within the boundaries of the District of Columbia. Court decisions have been conflicting, and the constitutionality of these laws is still in doubt. In 1923 the Supreme Court decided that the District of Columbia Act was unconstitutional, declaring it to be unreasonable interference with the individual's right of freedom of contract. This decision raised grave doubts as to the constitutionality of state laws. More recently the courts have indicated a change of attitude. While in 1936 the Supreme Court sustained the New York courts in declaring

that state's law invalid, yet in 1937[9] the Court overruled the earlier decisions and held that states could fix minimum wages for women and children as a legitimate exercize of the police power. A further impetus to state minimum wage laws was provided by Congress, when it approved in 1937 an interstate minimum wage agreement undertaken by several states in 1934.[10]

In 1938 Congress passed a Wages and Hours Bill which set a "ceiling" to hours (to be described below) and a "floor" to wages for industries engaging in interstate commerce. Minimum wages are established at 25 cents per hour for the first year and 30 cents per hour thereafter until the seventh year, by which time a "floor" of 40 cents is to be in operation. Some flexibility is provided for in the establishment of a Wage-Hour Administrator in the Department of Labor. It is his function to examine wages and hours in all industries in interstate commerce, and to determine where and when minimum wages should be flexed upward and maximum hours downward. To assist in this work, the establishment of some 750 boards, representing Industry, Labor and Consumers, is authorized. Factors to be considered by the boards in making their recommendations include local economic conditions, comparative transportation costs, and the size of the units in the industry. To collect pay awarded by the boards, employees can sue employers in federal courts, and violations of the law subject an employer to heavy penalties. Employers can, however, apply for a review of their case in the federal courts.

Altho this law is ostensibly designed merely to fix the limits below and beyond which wages and hours may not go, it may prove to be the opening wedge for more extensive federal regulation of wage rates and working hours. The boards set up by the act, empowered to change wages and hours within prescribed limits, resemble certain features of the National Recovery Administration, and may lead to a revival of that organization under another name. If such boards acquire authority *to determine* wages, there is danger that wage rates will become so rigid as to interfere with the smooth working-out of economic adjustments.

Reduction in the Hours of Employment.—The greater productivity of the present economic system has made possible a reduction in the working hours of labor. Just what constitutes a working day or week of suitable length is difficult to state. In defense of the shorter working day it is argued that it gives the worker more leisure time, prevents fatigue, and under some conditions increases the volume of production. Some leisure is necessary to the living of a normal, healthy life; cultural advantages can be achieved. The prevention of fatigue reduces the danger of industrial accidents and protects the health of the worker. Production is stimulated by the increase in efficiency that goes with reasonable working

[9] In *West Coast Hotel Co. v. Parrish,* 300 U.S. 379 (1937). Cited in Rohlfing, Carter, West and Hervey: *Business and Government* (1938 ed.), p. 623.
[10] *Ibid,* p. 624.

hours under healthful conditions. Experience during the World War demonstrated that a longer working day frequently means a reduction in productivity, because of increasing fatigue and the monotony of constant employment upon routine tasks. Against the reduction in working hours is the obvious fact that the strain of work differs widely in different occupations. For some strenuous types of work, a six hour day is long enough, while in other relatively pleasant and light kinds of work, ten hours may not be excessive. The danger of abusing leisure time is also present. In some industries it is said that technological conditions are such that a decrease in production must result, if the hours of employment are decreased.

The root of the controversy over the reduction in the hours of labor seems to be the disposition of the time saved by an increase in industrial efficiency. Should the labor time saved be absorbed by increasing the leisure of the workers, or should the prevailing conditions of employment be maintained and production increased, thus making possible higher standards of living? In the past, the gains have been absorbed partly in per capita increases in productivity and partly in the reduction of the hours of labor.[11] Standards of living have risen and the length of the working day has fallen from twelve or fourteen hours a day to eight or less hours in many large industries. The weight of evidence appears to favor the eight hour day and the forty-four hour week, at least for the present. Skilled workers have been very successful in forcing the adoption of the eight hour day thru the power of their trade-union organization. Unskilled workers have not been so successful. The nine or even ten hour day is not uncommon in some industries.

Considerable agitation exists for the limitation of working hours by legislation. In Europe such legislation is the rule, but in the United States it has been the exception. The view taken by the courts, that the limitation of hours of employment for men interferes with the constitutional guarantee of individual liberty and freedom of contract, has been a stumbling block. However, if it can clearly be demonstrated that social welfare is at stake in certain specified cases, the courts will hold the laws constitutional. Thus, the limitation of hours in dangerous occupations, in mines, and in transportation has been considered valid. In the first two cases the health and well-being of the worker himself are involved, while in the latter case the general public, which makes use of the transportation facilities, is in need of protection. The courts have also held that municipal, state, and federal governments have the constitutional right to limit the hours of employment of their own employees and of those employed in the building

[11] For a discussion of the relation of this problem to that of unemployment, see Chap. IX, pp. 172-173.

of public works. Many states and municipalities have passed eight hour laws of this type, and the federal government took the same step in 1912.

The Wages and Hours Bill described above provides for the establishment of a forty-four hour maximum the first year, a forty-two hour the second year and a forty hour thereafter. The powers of the boards are the same with respect to hours as described above for wages.

Child Labor.—Children can perform many of the tasks of industry almost as efficiently as adults. In fact, some persons believe that the combination of delicacy of touch, nimbleness of fingers, and lack of outside mental distraction, makes the child the most appropriate form of labor in certain occupations. The danger of sacrificing children to the god Mammon appeared in the early stages of the Industrial Revolution, and its presence has continued ever since as one of our most acute problems of social adjustment. The desire for cheap labor, combined with the docility of children, have proved too much of a temptation to the unscrupulous type of profit-seeking business enterprizer. Grasping parents have contributed to the problem by their unnatural willingness to sacrifice their own child's future for a few dollars of immediate income. Arduous factory labor, with its long hours of continual application to routine tasks, is disastrous in its effect on growing children, especially during the period of adolescence. Educational opportunities are lost, the natural instinct to play is curbed, physical development is retarded, and frequently standards of morality are corrupted thru the constant association of the child worker with adult employees of very low mental caliber. The moral fiber of the growing generation is also weakened by the relaxing of home discipline, for the earning of an income instils in the child a feeling of independence. Labor leaders have complained that the presence of children in industry has had the effect of depressing the general wage level. The wages of children usually supplement the total family income, and even tho the wage received is low, it is looked upon as a net gain to the family. Adults, who are usually supporting families, must thus meet very unfair competition from the child workers.

Those who favor child labor, at least in some degree, assert that the assumption that all children are capable of and should receive education until they reach the age of sixteen years is wholly unwarranted. In many cases, the best social policy is to place the child in industry as soon as it is possible without impairing health. This is especially true in the case of backward children. The struggling of a backward child to comply with compulsory education requirements beyond its ability should be avoided, and in its place substituted a healthy, useful, industrial occupation. The critics also claim that the families from whom the children come in many cases urgently need extra revenue, and the prohibition of child labor would so restrict the income of such families that the child himself would

suffer. Finally, it is often frankly asserted that healthy work has never hurt anyone and children should not be permitted to grow up in idleness. While there is, of course, some force to these arguments in favor of child labor, they really constitute arguments for carefully drawn and administered legislation, rather than no legislation at all.

The Present Status of Child Labor Legislation.—Every state in the Union has passed child labor legislation in one form or other, but the laws in some cases are very inadequate. Several states permit children to work ten hours a day. In most cases the limit is fixed at eight hours a day. The age limit for employment is usually fourteen years, with a somewhat higher limit for dangerous trades. Most states prohibit night work, and some provide for continuation school for a short period after the child is permitted to enter industrial employment. The ideal state child labor law should fix the minimum age for employment at fourteen years, limit the maximum day to eight hours, prohibit night work and work in dangerous trades, and require the filing of working papers, certifying the age, health, schooling, etc., of the child, before employment is given. At the same time, education should not be neglected, for in many ways the best child labor law is a well-constructed and well-enforced compulsory education law. It is not merely a coincidence that those states having the best child labor laws also have excellent systems of compulsory education, while those having poor child labor laws are usually afflicted with very poor compulsory education laws.

Federal Attempts at Child Labor Legislation.—Congress has made two attempts at the regulation of child labor for the United States as a whole, but the Supreme Court declared both laws unconstitutional. The first law, passed in 1916, prohibited the shipment in foreign and interstate commerce of all commodities produced in factories in which children under fourteen years of age had been employed, or children between the ages of fourteen and sixteen years employed for a period greater than eight hours in any one day or six days in any single week. Night work was also placed under the ban and the age limit raised to sixteen years in cases of certain dangerous occupations. This act the Supreme Court declared unconstitutional, in that it constituted an unwarranted extension of the power given Congress to regulate interstate commerce, since the obvious purpose of the act was not to control commerce between the several states, but to control indirectly industrial activity within a state. The second federal law was passed in 1919. This law contained the same provisions concerning child labor written into the earlier statute, but instead of prohibiting the interstate shipment of goods made with child labor, it placed a tax of 10 per cent on the net profits of corporations making use of child labor under the specified illegal conditions. The Supreme Court again ruled the legislation unconstitutional, this time asserting that Congress

had gone beyond its powers of taxation. To legalize federal legislation, Congress in 1924 submitted to the states for ratification a child labor amendment to the Constitution. More than three-fourths of them refused to ratify; but they have power to reverse their decisions. By the end of 1937 the number of states that had ratified the amendment had reached twenty-eight.[12]

President Franklin D. Roosevelt opened a new approach for federal regulation by requiring all industrial codes adopted under the authority of the National Industrial Recovery Act to contain a declaration that the use of child labor constitutes unfair competition. The Recovery Act was declared unconstitutional, but interest in child-labor legislation was aroused, and the Wages and Hours Bill of 1938 contains a section relative to child labor. Children under sixteen are barred from employment in industries engaging in interstate commerce, with some exceptions allowed where school attendance is not interfered with and where the Labor Department approves. All children under eighteen are barred from hazardous occupations. It is believed that the Supreme Court, in light of recent decisions, will approve the law.

The Protection of Women in Industry.—The entrance of women into the maelstrom of industry is one of the many fundamental changes of our social order that has recently taken place. From 1880 to 1930 the number of women employed in industry increased from 14.7 to 22.1 per cent of the total female population ten years of age and over.[13] The arguments used to justify the control of child labor apply equally well to the participation of women in industry. The Supreme Court has recognized the constitutionality of such legislation, by holding it to be within the police power of the several states. The actual number of laws enacted, however, has increased very slowly. Only a small number of states limit the labor of women to eight hours a day. Nine and ten hours are not uncommon, and in several states no limit whatever is fixed. Many of the states have established what are popularly called mothers' pensions. In six states the employment of women for a stated period prior and subsequent to childbirth is prohibited.[14]

Just how far the protection of women in industry should be carried is difficult to state. It is only recently that women have acquired a position approximating full legal status and economic independence. It would be unfortunate if well-intentioned, but hasty legislation would sacrifice these gains. Experience has shown, however, that women are often forced to accept unsatisfactory conditions of employment, and apparently some protective legislation is essential. Perhaps the development of trade unionism among women workers will assist in the solution of the problem.

[12] United States Department of Labor, Bureau of Labor Statistics, *State Labor Legislation* (1937), p. 2. The Kentucky Supreme Court, however, held that state's ratification invalid.

[13] L. Wolman and G. Peck, *Labor Groups in the Social Structure, Recent Social Trends* (1933), Vol. II, p. 805.

[14] Dale Yoder, *Labor Economics and Labor Problems* (1933), p. 390.

Other Protective Legislation.—The supervision of factory working conditions is a duty now universally assumed by public authorities. Factory inspection includes examination of the fire risk, the danger of building collapse, and general sanitary conditions. Accident prevention is also quite common. Safety devices of various types to protect the operator from exposed moving parts on machinery, appliances for the removal of dangerous fumes and dust, and similar protective requirements are enforced. Dangerous trades, and those which subject the worker to occupational disease, are universally controlled. Legislation of this sort is now so common that we need not present a detailed analysis of the laws here.

Summary

The relation between government and industry is an intimate one, for government is largely founded on the economic institution of private property. The policy of government toward business has fluctuated from time to time. In England, the comparative freedom from interference under the guild system was succeeded by the detailed regulation of the national, or mercantilist, régime, followed in the Industrial Revolution by *laissez-faire,* which recently has again given way to a policy of more regulation. In America, also, the early period of individual freedom from interference gave rise to abuses which have necessitated increasing government control. The manner in which our government has carried on its economic activities has been affected by the fact that sovereignty in the United States is divided between the forty-eight states and the federal government. The state governments have all the powers not specifically granted to the federal government, or implied as belonging to it, in the Constitution. The division of jurisdiction created awkward problems. The systems of checks and balances, dividing the authority between legislative, executive, and judicial branches, has also handicapped the passage of economic legislation. Since the Supreme Court of the United States has the power to declare any law unconstitutional, the legislative branches of the government cannot advance in the direction of greater regulation of business without its sanction. The authority of Congress to regulate business grows out of the power to regulate interstate commerce granted by the Constitution, and the courts have interpreted the power so extended rather liberally.

The economic functions of government are: the protection of the legal foundations of business enterprize—freedom of enterprize, private property, and freedom and security of contract; the rendering of public aid to the conduct of private enterprize; the protection of the general welfare; the regulation of business to protect the public from unfair competition and the abuse of monopoly power; and finally, public ownership of enterprizes in which private initiative has been found wanting. Government aids to

business include safeguarding ocean commerce, compiling and disseminating business data, granting patents and copyrights, making public improvements, maintaining the Weather Bureau and the Bureau of Standards, the conduct of research, the administration of currency and finance, and the enactment of protective tariffs.

The protection of the general well-being—health, safety, and morals—is accomplished chiefly under the authority of the police power. Under the police power, labor has been protected from the onslaught of industrialization by the passage of labor legislation. Unscrupulous employers under free competition might otherwise sacrifice their employees for the purpose of increasing profits. Labor legislation has been enacted to control sweat-shop conditions, to establish a minimum wage, to reduce the hours of employment, and to protect children and women in industry. Other forms of protective legislation are factory inspection, accident prevention, regulation of dangerous trades, and the prevention of occupational diseases. Federal legislation has been hampered by the question of constitutionality.

SUGGESTIONS FOR FURTHER READING

The relation between government and business is discussed in considerable detail in Rinehardt J. Swenson, *National Government and Business* (1924). This book was of considerable help in writing this chapter. An elementary but very satisfactory treatment of the structure and operation of our government is that of James T. Young, *The New American Government and Its Work* (1920). Charles A. Beard's *The Economic Basis of Politics* (1922) is a brilliant treatment of that very interesting topic. Also very stimulating is Elihu Root's *Experiments in Government* (1913). The legal framework of economic life is well presented by John M. Clark in *Social Control of Business* (1926), Chaps. VII-IX.

For an excellent discussion of the relationship between government and economics, see Herman Finer, *The Theory and Practice of Modern Government,* as revised by William B. Guthrie (1934), Chap. II. Chapters II and III of A. N. Holcombe's *Government in a Planned Democracy* (1935) give a picture of the part played by labor and capital in such a society.

For a rather detailed treatment of labor legislation see Edgar S. Furniss, *Labor Problems* (1925), Chaps. IV–VI; S. Howard Patterson, *Social Aspects of Industry* (1935 ed.), Part III; Dale Yoder, *Labor Economics and Labor Problems* (1933), Chaps. XI, XII, and XIV; and Carroll R. Daugherty, *Labor Problems in American Industry* (1938 ed.), Chaps. XX to XXIV, inclusive. Shorter but very useful analyses of labor legislation are Solomon Blum, *Labor Economics* (1925), Chaps. III and IV; and Henry R. Seager, *Practical Problems in Economics* (1923), Chap. XXX. The last mentioned work, while somewhat old, remains one of the best short treatments of the subject.

CHAPTER XXVI

GOVERNMENT REGULATION AND OWNERSHIP

A. The Control of Industrial Combinations

The Reasons for Government Control.—In our present economic organization, we rely mainly upon the initiative of private enterprize to carry on the operations of industry. Where private enterprize proves unable to fulfill its functions adequately, however, or where the activities of private individuals endanger the general welfare, we must resort to government intervention. During the last half century our government has been continually increasing its control over business as the public became convinced that certain aspects of private enterprize were breaking down. Normally we depend upon active vigorous competition among business enterprizers to protect the consuming public from economic exploitation. It is assumed that the public will purchase from the enterprizer offering the lowest prices, the best quality, and the most satisfactory service, forcing out of business those enterprizers who fail to meet the standard set by their more progressive competitors. However, when competition is restricted or perhaps even eliminated by monopolistic action on the part of enterprizers, this protection of the public is lost. The consumer is then at the mercy of the producer unless the government intervenes. Under conditions of monopoly, the power placed in the hands of industrial leaders may approach economic despotism as serious as the political despotism of days gone by. In Chapter V, the evolution of the trust movement was described and we observed that while the monopoly control possessed by many trusts made possible various economies that contributed towards the raising of the level of industrial efficiency, at the same time many abuses of power took place that made government intervention urgent. The fixing of abnormally high prices, the practice of unfair methods of competition, and the corruption of public authorities were mentioned as examples of anti-social practices. In exercizing social control over monopolies, two alternative policies are open. We may maintain free competition by the elimination of monopoly whenever its existence can be proved, or, we may permit the monopolies to exist but regulate their activities, especially the prices charged. The first policy, that of maintaining competition and eliminating monopoly, has been the dominant one in dealing with the trusts, while the second policy, that of regulation, has been followed in the control of railroads and

other public utilities. We shall be in a better position to evaluate these alternatives after an examination of our actual experience with them.

The Sherman Anti-Trust Act.—Early in the development of English common law, all contracts in restraint of trade tending to establish monopoly conditions were held invalid. This rule was later relaxed, the modern attitude of the courts being that a contract in restraint of trade will be declared valid if it can be proved that it was consummated for a just and honest purpose as between the parties to the contract, and that it is not especially injurious to the public.[1] State supreme courts first made use of this common law principle in attacking industrial combinations, and the trust in the technical sense was declared illegal on this authority. Experience soon demonstrated that the common law did not go far enough in protecting the public, for a case had to be brought by an individual who had suffered injury, and the redress obtainable was not sufficient to induce injured parties to carry their cases to court. There was no burden placed on governmental officials to bring action on their own initiative. To correct this situation many states passed laws prohibiting combinations in restraint of trade. These acts were ineffective, however, because the corporations involved were large enough to do business in more than one state. Federal action was necessary; therefore in 1890 the famous Sherman Anti-Trust Act was passed by Congress. Section 1 of this act provided that "Every contract, combination in the form of trust or otherwise, or conspiracy, in restraint of trade or commerce among the several states, or with foreign nations, is hereby declared to be illegal. Every person who shall make any such contract, or engage in any such combination or conspiracy, shall be deemed guilty of a misdemeanor, and, on conviction thereof, shall be punished by fine not exceeding five thousand dollars, or by imprisonment not exceeding one year, or by both said punishments, in the discretion of the court." Section 2 of the act prohibited attempts to monopolize any part of interstate trade or commerce. The act further provided that the word "person" should be construed to include corporations and associations, and that persons injured by trusts could sue an offending combination for triple damages, plus the costs of suit.

The Operation of the Sherman Act.—The effect of the Sherman Act was not felt immediately. Its all-inclusive wording and indefinite phraseology, combined with the lack of real sympathy for the purpose of the law on the part of government officials and the justices of the courts, served to relegate it to an unimportant place for many years. The first case brought before the Supreme Court, *United States vs. E. C. Knight,* decided January 1895, gave a serious set-back to effective regulation. The court declared that Congress had the power to control *commerce* but had not the power to control manufacturing. In this particular case the prosecution had not, in the opinion of the court, proved any intention to restrain

[1] See *Hubbard vs. Miller,* 27 Mich. 15.

trade or commerce between the states and with foreign nations. The case was consequently decided against the government. The shadow of doubt cast over the power of Congress to regulate industrial trusts by this decision gave the trust movement additional impetus. A decision against the corporations at this point in the history of government regulation of business might have discouraged the creation of new trusts and reduced materially the problems that subsequently developed. For the first ten years of its life the Sherman Act was made use of almost entirely for the control of railroads, altho the purpose of its passage was the regulation of industrial trusts. The real power of the law was demonstrated in 1899, however, by the decision of the Supreme Court in *Addyston Pipe and Steel Company vs. United States.* The Addyston Pipe and Steel Company was a pool of producers of cast-iron pipe. The members of the pool divided the United States into districts which were then allotted to the various companies as exclusive markets for their product. The Supreme Court, in a unanimous decision, decided that this pool constituted a combination in restraint of trade and upheld the power of the federal government to restrain its activity. This case discouraged further formation of trusts and gave convincing proof that the Sherman Act possessed real "teeth." In 1904 the Supreme Court rendered its decision in *Northern Securities Company vs. the United States* and further intrenched the power of the government. The Northern Securities Company was a holding company incorporated under state law, but the Supreme Court declared that this was not sufficient reason for permitting the corporation to act contrary to the intent of the anti-trust law. The court went into great detail in stating just what regulatory power Congress possessed, clarifying the situation considerably.

The Rule of Reason.—In 1911 the Supreme Court gave a new and significant turn to the enforcement of the Sherman Anti-Trust Act in two separate decisions, declaring the Standard Oil Company of New Jersey and the American Tobacco Company to be combinations in restraint of trade. The court ordered their dissolution within a period of six months. The Standard Oil Company was a holding company, organized under the laws of the state of New Jersey, which had succeeded in controlling the major proportion of the oil industry of the United States. In rendering its decision, the Supreme Court declared that the Sherman Anti-Trust Act must be interpreted in the light of the background of its enactment. The wording used in the act had evolved under the common law, and, since the common law on restraint of trade admitted the legality of *reasonable restraint,* the same construction should be given the phrase "restraint of trade" when used in the trust legislation. The court was prepared to declare a corporation illegal only when it restrained trade *unreasonably.* The activities of the Standard Oil Company were considered unreasonable and the dissolution was ordered. In restoring competition, the corporation was per-

mitted to distribute the shares of the subsidiary companies to the shareholders of the parent corporation on a *pro rata* basis. This, of course, left the control of all the subsidiary corporations in the hands of the same persons as before, but apparently the court hoped that the passage of time would result in changes in the ownership of stock. The subsidiary companies, to whom independence was restored, were enjoined from future combination of any sort which might have the effect of limiting competition.

The case of the American Tobacco Company is important, because this organization was primarily a merger rather than a holding company. Many competing firms had been purchased and were owned outright by the American Tobacco Company. However, the Supreme Court held that the law applied equally well in the case of such a super-corporation. This established once and for all the fact that the court would look behind the form of organization to the practical results. *Any* form of organization would be declared illegal if unreasonable restraint of trade could be proved. The American Tobacco Company was divided into three independent corporations, and the various brands were so distributed between them that competition would be possible. Subsidiary corporations were also separated from the parent concern. As in the case of the Standard Oil Company, the new independent companies were enjoined from future combinations of any sort having the tendency to limit competition.

Many persons have questioned the right of the Supreme Court to restrict the broad provisions of the Sherman Act, prohibiting *all* restraint of trade, to the narrower meaning of *unreasonable* restraint. It has been said that this interpretation amounted to an amendment of the statute; legislative power had been assumed by a judicial body. Nevertheless, the rule of reason made the anti-trust legislation workable. It established a definite basis for future government prosecutions. In 1920 the Supreme Court, continuing this line of development, refused to order the dissolution of the United States Steel Corporation, asserting that mere size was not an indication of restraint of trade. The court went so far as to state that the public interests would suffer if this corporation were dissolved.

The Clayton and Federal Trade Commission Acts.—Under the stimulus of the success achieved in the Standard Oil and the American Tobacco Companies cases, numerous prosecutions of trusts were made during the administrations of Presidents Theodore Roosevelt and Taft. Public dissatisfaction with the power of trusts still continued, however. Therefore, during the political campaign of 1912, both parties promised further legislation. The result was the passage of the Clayton Act and the Federal Trade Commission Act in 1914. The Clayton Act possessed little unity. It was a combination of several bills dealing with rather different phases of the trust problem, combined merely for convenience. It sought to clarify doubt-

ful parts of the Sherman Anti-Trust Act and also to accomplish several miscellaneous objects before Congress at the time. The major provisions were the prohibition of local price discrimination and of exclusive contracts or leases, and the declaring of holding companies and interlocking directorates to be illegal if they tended to restrict competition or to create monopoly. In order to strengthen the enforcement of the Sherman Anti-Trust Act, it was also provided that its violation by a corporation was to be considered a violation by the directors, officials, or agents responsible for the illegal move, and such individuals were to be subject to the penal provisions of the Anti-Trust Law. Enforcement of anti-trust legislation was placed in the hands of the Federal Trade Commission for industrial combinations, the Interstate Commerce Commission for common carriers, and the Federal Reserve Board for financial institutions. The act also contained several provisions relating to labor organizations which need not concern us here, except to note that labor organizations were not to be considered organizations in violation of the anti-trust laws.

The Federal Trade Commission Act created a commission appointed by the President, with powers chiefly of investigation and publicity. The commission was empowered to investigate the organization, management, and business practice of all corporations engaged in interstate commerce. It was authorized to demand the preparation and submission of annual or special reports or written answers to any specific questions which it might desire to ask. Investigations and reports were to be undertaken on the order of the President, either house of Congress, or the Attorney-General. The commission was also charged with the duty of preventing unlawful and unfair competition, as distinct from monopoly control. This provision was especially valuable for it gave the commission power to curb the development of monopoly power right at the very beginning of its growth. If the orders of the commission were not complied with, a request for an injunction could be made to the Circuit Court of Appeals. Punitive power rested with the courts, not with the commission. The use of publicity was the most important coercive power given the commission.

The idea behind the legislation of 1914 was the prevention of the growth of restraint of trade and monopoly rather than the punishment of offending parties after an overt act had been committed. Once a combination develops, gains in size, and acquires control over an industry, it is extremely difficult to break it up. The task of prevention is far easier than that of breaking up a strongly intrenched industrial organization.

The Robinson-Patman Act.—In 1936 the Clayton Act was amended by the Robinson-Patman Act, which was mentioned in Chapter XII. This law, the result of a Congressional investigation recommended by the Federal Trade Commission, was designed to protect small retail traders against chain stores. It had been charged that chain stores often coerced manufacturers to

grant them special concessions by threats of refusal to buy, or to advertize and display, their wares. The Patman Act forbids payments or allowances of this type unless they are in payment for services actually rendered.[2] The Trade Commission, which administers the Act, has held illegal the granting of any price discount which is not justified by differences in cost of manufacture, sale or delivery.

The Success of Trust Legislation.—There is much difference of opinion as to the success of our policy of control over industrial trusts. The chief defect has been the difficulty of restoring competition by court decrees ordering dissolution. The apportionment on a *pro rata* basis of the securities of companies given independence has been described as a farcical procedure. The Federal Trade Commission, in a report on the price of gasoline in 1915, declared that the former subsidiaries of the Standard Oil Company maintained complete division of territory embracing the whole country, and that almost without exception each Standard marketing company occupied and supplied the district to which it was allotted. Independent companies followed the prices set by the Standard companies. No less an authority than Louis D. Brandeis, now a member of the Supreme Court of the United States, declared "That the net effect of the dissolution was to legalize the combination previously held illegal."[3] Yet there is much to be said on the other side of this question, for even in this most extreme case of the Standard Oil Company, a gradual redistribution of stock has taken place, new corporations have entered the business, and new oil fields have been opened, establishing a considerable degree of effective competition in the industry.[4] Many dissolution decrees were successful in restoring competition at once. We must also not lose sight of the fact that the threat of government intervention and the constant legislation against industrial trusts had a decided influence in checking their development. No one knows to what length combination and monopoly in the United States might have gone if legislation had not been enacted. The chief difficulty has been the lack of real enforcement. Juries have been reluctant to hold directors and officials of corporations criminally liable in accordance with the Sherman and Clayton Act provisions. If these penal clauses were enforced, unquestionably the whole problem of trust regulation would be changed. Successful business men would hesitate to take an action that might result in a sentence of six months in jail. Even the fines were fixed at inadequate amounts, for in many cases they did not cover the gains made by the combination during the period of its illegal activity. No legislation can be successful that does not secure the active coöperation of governmental officials in its enforcement. Recently the in-

[2] See Agnew, Jenkins and Drury, *Outlines of Marketing* (1936), p. 91.
[3] Quoted from Eliot Jones, *The Trust Problem in the United States* (1922), p. 461.
[4] See G. W. Stocking, *The Oil Industry and the Competitive System* (1925).

fluence of the "rule of reason" has borne fruit, for large corporations are now courting public favor, and many have given up, voluntarily, practices that they know would make them liable to prosecution.

The National Industrial Recovery Act.—The traditional American policy of maintaining free competition was repudiated by the passage of the National Industrial Recovery Act of 1933 as a recovery measure. Subject to Presidential approval, industries were authorized to centralize the control of their activities, utilizing the trade association as an administrative agency. The recovery aspects of this Act were discussed in Chapter XIV. Upon the application of one or more trade associations or groups, the President could approve a code of fair competition for the trade or trades represented. The associations were to impose no inequitable restriction upon the admission of new members, were not to encourage monopoly or oppress small businesses, and were not to jeopardize the rights of employees, consumers, and the general public. If any industry should fail to act, or should act in an unsatisfactory manner, the President could prescribe a code for the delinquent group. Violations of the agreement were declared to be unfair competition within the meaning of the Federal Trade Commission Act. The Federal Courts were given jurisdiction. As emergency legislation, the authority of the law was limited to two years.

Where the President found destructive wage or price cutting, or other activities contrary to the policy of the act, he could license business enterprizers in order to make the established code effective. These licenses could be revoked after due notice and opportunity for hearing. Any person continuing in business after the loss of his license was subject to a penalty of $500, or six months' imprisonment, or both, for each offense, and every day of violation was considered a separate offense. Authorization to utilize this powerful weapon was to expire within one year after the act was approved, or sooner if the emergency was declared ended.

The labor section of the law was important. Every code provided: (1) that employees should have the right to organize and bargain collectively thru representatives of their own choosing; (2) that no employee should be required to join a company union, or refrain from joining a labor organization of his own choosing, as a condition of employment; (3) that employers should comply with the code as to maximum hours of work, minimum rates of pay, and other conditions of employment. Employees and employers were to be given opportunity to determine by mutual agreement these hours, wages, and conditions. If they failed to reach an agreement, the President could prescribe such conditions.

While the law was in effect any code, or action complying with the provisions of a code, was exempt from the provisions of the federal anti-trust legislation. The reward for compliance was the privilege of acquiring freedom from the restrictions of the Sherman Act. The law also contained other

provisions, such as the regulation of the oil industry, the construction of public works, and several new tax requirements.

The National Recovery Administration.—Under the authority given him by the Act, the President created a National Recovery Administration (popularly known as the NRA) to put its provisions into effect and supervise their operation. It included National and State Advisory Boards, and a Code Authority for each industry affected. Before long several hundred codes were drawn up and adopted, embracing nearly every industry. It was a vast institution with an enormous number of regulations. Had it continued, the organization and control of American business would have been profoundly altered.

It is not surprizing that, with the opportunity thus given our business leaders to act in concert without fear of prosecution under the anti-trust laws, restrictions affecting prices, wages, hours and output were written into the codes. Since the code authorities were dominated by the larger business interests, many of these provisions were so framed as to put their smaller competitors at a disadvantage. The government's authority to prevent these abuses was ineffectively used, so that soon vigorous protests were heard from the injured parties, and the whole program was subjected to criticism and attack.

The fight was carried to the Supreme Court of the United States. Many doubted the constitutionality of the law from the start, but the Administration hoped that it would be upheld as a piece of emergency legislation. However, in 1935, by a unanimous decision, the Supreme Court held that Congress had exceeded its powers in delegating to the President such sweeping legislative functions as were embodied in the code-making, and it therefore declared the act unconstitutional.[5]

As a result of this decision, the structure of the NRA and its codes practically collapsed. Some industries continued many of their code provisions on a voluntary basis. A greatly reduced NRA personnel was maintained in Washington to study the possibilities of further coödination and planning in industry, but the ambitious program of business regimentation at first embarked upon was discontinued.

The Changing Attitude toward Industrial Combinations.—From the Civil War down to the period of American participation in the World War public opinion, as expressed in legislation, was distinctly hostile toward industrial combinations. Legislation was of the "trust busting" type. The aim was to maintain competition and eliminate monopoly wherever it appeared. The experience of the World War and the post-war period has modified this opinion to a very marked degree. This change was first evidenced by the passage in 1918 of the Webb-Pomerene Act, which permitted the formation of combinations of American business enterprizes engaged in export trade,

[5] This was the famous Schechter poultry case, decided May 27, 1935.

in so far as their export business was concerned. These associations were exempted from complying with anti-trust legislation. The purpose was to permit small companies to unite, enabling them to command sufficient resources for carrying on export trade profitably. There was also a feeling that the lack of restrictive legislation in Europe gave foreign producers advantages over the American producers, and it was felt that our restrictive legislation should be relaxed to permit American competition in world trade on an equality with English, German, and French industrial combinations. The passage of this law was a tacit recognition that there are advantages to be gained from the formation of industrial trusts. During the World War the government endeavored to consolidate the industrial powers of the country in order to increase the efficiency of our industrial system as a means of winning the war. The general public was beginning to appreciate the economies of large-scale production and the economic waste of unrestricted competition. The shift in opinion was clearly demonstrated by the insertion of a provision in the Transportation Act of 1920, ordering the Interstate Commerce Commission to draw up plans for the consolidation of railroads into a smaller number of independent systems. Finally, the National Industrial Recovery Act of 1933, for a period of two years, gave considerable exemption from the provisions of the anti-trust legislation to industries adopting codes under its authorization. If this development is to continue, the federal (instead of state) incorporation of businesses doing an interstate business will prove very helpful to the government in the exercize of its regulatory power. Federal incorporation would eliminate the conflicts of jurisdiction between states that now take place and would greatly simplify procedure by giving the federal authorities direct control thru the power to grant licenses.

B. The Regulation of Public Utilities

Characteristics of Public Utilities.—We learned in Chapter XIII that there is a group of industries, known as *public utilities,* which have long been recognized as being properly subject to a greater degree of regulation than is commonly applied to private businesses. In early English law there were certain callings, such as inn-keeping, operating a ferry, and transporting merchandize, which the courts declared were "affected with a public interest" and which might, therefore, be controlled by the public authority. In modern times the number of such industries has been greatly extended. Among them may be mentioned railroads, street railways, steamship transportation, wharves, grain elevators, telegraphs, telephones, water, gas and electric supply. The companies which supply these commodities or services are known as *public service corporations.*

Neither the courts nor the commentators have set forth the doctrine of public interest with sufficient definiteness to enable us to state exactly what attributes will cause an industry to be classed as a public utility, but certain

broad features which are usually characteristic of such enterprizes may be described. Often the business enjoys some peculiar privilege granted by the public authority, without which it would not be able to exist. For instance, the construction of a railroad involves the condemnation of private property for the creation of its right of way, and to secure this the railroad must invoke the state's power of eminent domain. Street railways, and telephone and telegraph lines, must lay their tracks or erect their poles upon the streets or highways, a privilege which is obtainable only by grants from the state or municipality. Hence, it has been held that, since the state has bestowed unusual privileges on these corporations, it may impose upon them unusual duties and restrictions. But this is not always a feature of public utilities, for it does not apply to grain elevators and stockyards. These enterprizes do not use the streets, nor require any rights of way. Both of them, nevertheless, have been held to be affected with a public interest.

A more important characteristic lies in the fact that public utilities are supplying some commodity or service so essential to our economic life that it may be regarded as a public necessity. People are peculiarly dependent upon the railroads for their very means of existence and are compelled to patronize them. The railroads are thereby put in a position of unusual power which justifies measures of unusual regulation. Similarly, the street railways, electric, gas, and telephone services are so integral a part of domestic and business life that the public is coming to be peculiarly dependent upon them. The same can be said of other businesses which fall under the head of public utilities.

The characteristic of these businesses which most clearly endows them with a public interest, however, is the fact that in nearly every case they are monopolies. Frequently they are monopolies by virtue of the very nature of the business. For instance, usually only one good source of water supply is available to a community. If this is exploited by a private company, its power might well be used obnoxiously. Such industries as the railroads, telephones, telegraphs, gas and electric companies may be described as natural monopolies of increasing returns; that is, the furnishing of these facilities requires so huge a plant, ramified over so large a territory, that its duplication by a competitor would be extremely hazardous and wasteful. One plant, in such cases, can take on additional business far more cheaply than it could be done by an additional plant serving the same territory. Moreover, competitors in many such cases would not render the best service to the public, for the community is better served if all subscribers are on the same telephone line or if a city's transit lines are unified into one system. Hence, it has been considered good policy directly to encourage monopoly by granting exclusive franchises to one company to supply the whole of the service thruout its territory. It is primarily the monopoly aspect of public utilities that has caused them to be singled out for special governmental regulation. In some cases it is difficult to

draw the line between that which is to be classified as a public utility and that which is not. In the last analysis, almost every business is affected with some degree of public interest. The distribution of milk or bread in a modern city might well be so classified. The tendency of the courts recently has been, in fact, to broaden the scope of legislative authority in determining what businesses affect the public interest sufficiently to justify regulation. Furthermore, the courts have decided that monopoly *need not* be the most important criterion by which to judge whether a business is affected with a public interest.[6]

Public Utilities Commissions.—It has been found most suitable to carry out such regulation by means of commissions created for the purpose. The federal Interstate Commerce Commission is the most important of these agencies, and, since the regulation of railroads is such an important matter in itself, we shall give it more careful attention below in Section C. Most of the utilities commissions are under state, rather than federal jurisdiction, because public utilities, other than railroads, rarely do business in more than one state. The states have established *public service commissions* or *public utilities commissions* with varying degree of power, their duties having to do primarily with quality of service and rate making. The rate-making problem takes a commission into questions of valuation, control of the issue of new corporate securities, standardization of accounting methods, and similar matters. The service duties of the commission include the authorization of extensions to lines or service, permission to abandon old lines, the enforcement of equity in the treatment of customers of different classes, and the protection of the quality of the product sold. A number of these problems have already been discussed with sufficient fullness in Chapter XIII.

The Public Utility Holding Company.[7]—In recent years the extensive use of the holding company form of business organization has hampered effective regulation by the states. The legal definition of a public utility restricts the concept to an enterprize that sells to the public a certain product, or service, the production of which is affected with a public interest. Since a holding company is not an operating company, producing products or services, the state public service commissions have been unable to reach such companies effectively. Public utility holding companies control properties so widely separated as to preclude thoro integration of plants; the economies gained are restricted to such advantages as greater financial strength and the integration of the various phases of management. Therefore the questionable motives of gaining profits thru security transactions and the desire to avoid regulation by public commissions, have played too important a part in their formation. The development has reached a point where it "threatens the whole American scheme of private ownership under government regula-

[6] See Rohlfing, Carter, West and Hervey: *Business and Government* (1938), pp. 221-222.

[7] See J. C. Bonbright and G. C. Means, *The Holding Company* (1932), Chaps. V, VI, VII.

tion."[8] Holding companies have been accused of encouraging unwieldy consolidations, facilitating capital inflation, increasing the secrecy of corporate accounts, and "milking" subsidiaries by extortionate service charges.[9] The consumer must bear the burden of such cost in the form of higher rates.

Some states have attempted to avoid a complete breakdown in regulation by reaching the holding company indirectly thru regulation of the operating company. The results have been of doubtful value and there is a growing belief that more direct contact with the holding company is necessary. The federal government vigorously entered this field of regulation with the Utilities Holding Company Act of 1935. This law grants regulatory powers to the Federal Power Commission and the Securities and Exchange Commission. As soon after January 1, 1938, as the latter commission directs, utility holding companies more than twice removed from their operating subsidiaries are to be eliminated (the so-called "death sentence"), and companies remaining in the field must operate in regions geographically and economically integrated. The constitutionality of this law is in doubt. Should the present impasse continue, government ownership may be the only protection left the public. Many municipalities have already taken this step.

The Present Attitude towards Public Utilities Commissions.— The state public utilities commissions in their early stages maintained a vigorously aggressive policy toward the corporations under their jurisdiction. However, changing conditions soon forced the adoption of a more conciliatory attitude. The rising price level, especially during the World War, made it imperative that rates be raised. Public service corporations opened vigorous campaigns to that end, and the commissions quite generally complied. Then the number of cases brought before the commissions multiplied so rapidly that they were forced to sit merely as judicial bodies reviewing evidence that was brought before them, instead of assuming the rôle of aggressive defenders of the public interest, conducting on their own initiative searching investigations of public service corporations. Thus the public was at a very great disadvantage, for the corporations were always represented by very capable lawyers. Many of the large cities became dissatisfied with state control of their local public service corporations and they demanded home rule; that is, local control over local utilities. The general public was becoming suspicious of the decisions handed down by the state commissions, even going so far as to charge corruption in the form of collusion with the public service corporations. This state of mind on the part of the public is still prevalent in many sections of the United States. Unquestionably, a heavy strain has been placed on the integrity of the commissioners, for the corporations under their control are powerful, both politically and financially. Yet the public utilities commissions remain the most effective form of public utility regulation thus

[8] *Ibid.*, *p.* 93.
[9] *Ibid.*, pp. 153–154.

far devized. We should direct our energy towards increasing their efficiency rather than toward abandoning them, for the only alternative method is the much less satisfactory one of direct legislative control. So far, no widespread movement has appeared aimed at radical changes in the present regulatory system, altho much criticism has been made and many reforms have been suggested. Some authorities favor the election of commissioners in place of the present method of executive appointment. A more novel suggestion is that of creating two commissions, one sitting as a judicial body and hearing evidence, and the other acting as public defender, making investigations and securing evidence to protect the public interest.

An interesting development has been the indirect control of utilities thru the use of a government "yardstick." That is, when the government owns and operates the Tennessee Valley project, for example, a standard is set up by which to measure the reasonableness of privately-owned utility rates. This method of control over rates has evoked a great deal of controversy as to the fairness of using tax-free government-owned utilities as a measuring rod.

C. The Regulation of Railroads

The Size and Importance of Railroads.—The opening up of the western section of the United States coincided with the development of the technique of railroad transportation. The result was an unusual development of railroads and retardation of the growth of water transportation. The part the railroad plays in the economic and social life of the American people is almost too much for our imagination to grasp. The total railroad mileage in the United States in 1930 was 260,475[10] or approximately one-third of the railroad mileage of the world, and more than the total mileage in all Europe. The capitalization of the railroads for that year amounted to $24,331,000,000.[11] Total operating revenues of Class I railroads (those having operating revenues in excess of $1,000,000 a year) were $5,281,197,000.[12] Railroads are the arteries of business. Without adequate transportation, specialization is impossible. Raw materials must be carried to the manufacturers, and finished products must be distributed to the consuming population. Specialization by geographic districts has evolved to a marked degree in the United States. The growing of fruits in California, of cotton in the South, and of wheat in the Northwest, and the making of textiles in New England, are typical illustrations. The railroads are important, not only economically, but socially, for the freedom of movement they permit binds the country together into a homogeneous unit. There have been some unfortunate results, such as the concentration of people in large cities where their very lives depend upon the continuity of transportation service, but, in general, railroads have made possible the development

[10] *Statistical Abstract of the United States* (1932), p. 380.
[11] *Ibid.*, p. 374.
[12] *Ibid.*, p. 381.

of an efficient industrial organization. While the railroads are owned and operated by private individuals, the interest of the public in them is great. Not only are they the largest single class of public utilities, but the various governmental units of the United States have extended them liberal aid. Financial assistance was given by the federal and state governments to railroad corporations to assist them in building their roads. Some states made gifts, others extended loans, and many purchased railroad stocks and bonds. It was common to grant railroads special privileges, such as exemption from taxation. Large tracts of public lands were given as subsidies, totalling in acreage several times the area of the entire state of Pennsylvania. There are, therefore, good reasons for singling out the railroads for special regulation of a comprehensive sort.

State Regulation of Railroads.—Up to 1870 very few attempts were made by the states to control the activities of the railroads within their borders. In fact, the opposite policy, that of encouraging the private owners in every way possible, was quite general. Several states established railroad commissions, but they were of a very weak type, restricting their activities to mild supervision rather than direct regulation. The first demand for regulation came from the farmers of the middle western states. Organizations of farmers, under the name of National Grange Associations, were the prime movers in stirring up public feeling against the railroads. Following the lead of Illinois, legislation of a direct and drastic type was passed by state after state. These laws were directed towards the control of rates and removal of the abuses of discrimination. They also forbade railroad pools and rate agreements between competing lines. In many cases state commissions of a strong type, having regulatory power, were established. The railroads at once attacked the constitutionality of these "granger laws" and refused to obey the orders of the regulatory bodies. Many of the states repealed their laws in a few years. However, in time the constitutionality of the state laws was accepted by the courts, chiefly on the ground that railroads were common carriers and common carriers have always been subject to regulation under the common law. Nevertheless the general results obtained were very unsatisfactory. It was soon apparent that the nature of railroad problems made it difficult for any one state to act successfully, and the continued pressure of public agitation finally resulted in the passage of federal legislation in the form of the Interstate Commerce Act of 1887.

The Interstate Commerce Act.—The Interstate Commerce Act is unquestionably one of the most important laws ever passed by Congress. It was enacted under the power given the federal government to regulate interstate commerce, and contained the following provisions: (1) It declared that railroad rates should be reasonable and just. (2) It required that freight rate and fare schedules must be published, and ten days' notice must be given of proposed increases. (3) Unreasonable discrimination between persons,

localities, and commodities was prohibited. (4) The charging of a higher rate for a short haul than for a long haul, under substantially similar circumstances and conditions, over the same lines, and in the same direction, was prohibited, tho exceptions might be made to this provision in the discretion of the Interstate Commerce Commission created by the act. (5) The organization of pooling agreements, whether pools of traffic or earnings, was prohibited. (6) A commission, known as the Interstate Commerce Commission, was established, having five members appointed by the President with the advice and consent of the Senate. This commission was charged with the duty of enforcing the act and was given power to investigate the management of the carriers, require testimony of witnesses, demand access to books, papers, and contracts of the roads, and seek the aid of the courts to enforce its decisions.

For a few years the commission functioned with great success, eliminating flagrant discrimination and cutting down the power of pools. Considerable revision of railroad tariffs was accomplished. However, there soon developed opposition that weakened its powers. Witnesses refused to testify, claiming immunity under the constitutional guarantee that individuals must not be required to testify against themselves in criminal cases. The federal courts handicapped the work of the commission by interpreting very narrowly the powers extended by the Interstate Commerce Act. They even went so far as to permit the introduction of new evidence when a case was brought within their jurisdiction. This had the effect of discrediting the commission, and railroad attorneys withheld information arbitrarily when arguing their cases before it. The final blow was a decision of the Supreme Court that the commission could legally declare a rate unreasonable but could not state what a reasonable rate would be. After over a decade of operation, the inadequacy of the commission's power, in the light of judicial interpretation, was so thoroly demonstrated that the abuses practiced by the railroads were almost as serious as before the Interstate Commerce Act was passed. Further legislation was demanded.

The Strengthening of the Commission.—Popular demand finally succeeded in increasing the power of the commission, chiefly thru the passage of three acts, the Elkins Act in 1903, the Hepburn Act in 1906, and the Mann-Elkins Act of 1910. The Elkins Act was directed principally against personal discrimination and secret rebates. Deviation from published schedules of rates were made subject to heavy fines, and the receiver of the rebate, as well as the railroad, was considered a violator of the law. The Hepburn Act extended the scope of the Interstate Commerce Act to include other transportation agencies, such as express companies, sleeping car companies, and pipe lines. The commission was granted the power of fixing maximum rates, subject to review by the courts. The period of advanced public notice of deviations from published rate schedules was increased to thirty days. The

commission was empowered to prescribe a uniform accounting system for all roads engaged in interstate commerce. The law also increased the number of commissioners to seven. The Mann-Elkins Act of 1910 empowered the commission to suspend new rates proposed by the railroads, placing the burden of proof for any increase in rates upon the carrier. The long-and-short haul clause of the Interstate Commerce Act was strengthened and clarified. A new special court, known as the Commerce Court, was created, to have jurisdiction over cases against common carriers. It was hoped that this court would relieve the congested dockets of the federal courts. While it functioned successfully, the Commerce Court was unable to retain the approval of Congress and was abolished in 1912 by the failure of that body to give it financial support.

The new railroad legislation changed the commission into one of the strong type. During this period of evolution the attitude of the courts became more conciliatory, and the power of the commission became intrenched. The rising price level contributed to its success, for the railroads were constantly forced to ask for increases in rates to meet the rising costs of operation. The reluctance of the commission to permit rate increases was perhaps carried too far, for the roads soon found themselves in a very strained financial position, and by 1914 equipment had deteriorated and earning power diminished to such a degree as to be cause for national concern.

Federal Operation of Railroads.—On the declaration of war against Germany in April 1917, the railroad executives of the United States, at the request of the Council of National Defense, organized an executive committee, known as the Railway War Board, to coördinate the railway systems of the United States for the purpose of facilitating the movement of traffic necessary to the winning of the war. The difficulties facing this board were many. Heavy traffic in war materials developed, all of which had to be moved eastward towards the seaports, causing congestion at the terminals. The rapidly rising price level, the increased cost of operation, and the drain of the war on the man-power of the nation, created a labor shortage. Equipment was inadequate. To these difficulties was added the almost unrestricted issue of priority of shipment orders by public officials until the point of absurdity was reached where the bulk of the traffic was moving under a priority order. The Railroad War Board accomplished much, but in face of impending disaster, on December 26, 1917, the President of the United States took over the roads by request of the Interstate Commerce Commission. The authority for this had previously been extended by the Army Appropriation Act. On the request of President Wilson, Congress subsequently passed the Federal Control Act, making the government's power over the railroads more definite. The roads were guaranteed earnings not to exceed the average operating income for the previous three-year period, and notice was given that they would be returned to their private owners a year and nine months after peace was declared. The

operation of the railroad systems was placed under a Railroad Administration headed by Director General McAdoo, then Secretary of the Treasury. The individual identity of the various systems was lost; terminal facilities, cars, repair shops, and other forms of equipment were used wherever they were most needed, without regard to individual ownership. Freight was carried over the shortest routes and priority of shipment was rigidly supervized. The eight-hour day was generally adopted, and collective bargaining established. During government operation wages were increased, and at one time freight rates were advanced on the average about 25 per cent.

The Success of Government Operation.—The unification of railroad systems prevented the breakdown of the roads which was threatened by the terrific strain placed upon them by the war. To what extent the experiment was successful has been much disputed. The technical operation of the roads is generally conceded to have been a success. Railroad executives themselves admit that much. The arbitrary measures taken by the Railroad Administration were essential to controlling the traffic, and the results obtained justify the action taken. As to the financial side, evaluation of success is far more difficult. The excess of expenses and rentals over operating revenues amounted to more than a billion dollars, which sum had to be raised by congressional appropriations out of receipts from general taxation. This has been taken by many persons as an indication of inefficiency and the failure of government operation. Such a conclusion is unwarranted, for the conditions under which the government assumed control were so extraordinary that the experiment has little significance as an indication of the possibilities of government operation in normal times. We must remember that if private operation had been maintained, the same problems would have faced private owners that faced the federal government. Wages of railroad employees were increased, it is true, but the wage level in other industries was generally much higher. Operating costs and the cost of living increased to a higher point than ever before. If the Railroad Administration had raised freight rates to compensate for this change, it could no doubt have shown a profit, but it was far more important to maintain freedom of movement of traffic than to show an operating surplus. Undoubtedly some relaxation in the efficiency of the railroads took place during the war, but the extent to which this was the result of federal operation is difficult to determine, for many private enterprizes experienced similar inefficiency.

The Present Status of Railroad Regulation.—In February 1920, the Transportation Act of 1920, providing for the return of the railroads to private owners on March 1, 1920, became a law. It provided that the Interstate Commerce Commission should fix railroad rates at a point that would yield a fair return on the value of the roads, and that for the first two years this fair return was to be 5½ per cent, plus an additional ½ of 1 per cent for improvements, at the discretion of the commission. In 1922 the fair rate

of return was changed to 5¾ per cent by the Interstate Commerce Commission. Since the conditions of the various roads differed, a recapture clause provided that strong roads earning more than 6 per cent were permitted to keep one-half of their excess earnings for surplus and the other half was to be paid into a fund to be loaned to the weaker roads and for other transportation purposes. The commission was ordered to draw up plans for the consolidation of the railroad systems of the United States into a fewer number of larger systems. The establishment of these consolidations, however, was to be a voluntary act of the roads concerned; the commission had no power to compel it. The establishment of pools was authorized in case the commission believed such action desirable. The law also increased the size of the commission to eleven members, and strengthened its powers in many less important ways, such as by giving it control over minimum as well as maximum rates, placing the issue of railroad securities under its jurisdiction, and granting the power to require joint use of terminals. Several labor provisions were included, one of which provided for the creation of the Railroad Labor Board which has been discussed in Chapter VII.

On June 16, 1933, an Emergency Transportation Act was approved. This law created the office of Federal Coördinator of Transportation, who was directed to divide the railroads of the United States into three large groups —an Eastern group, a Western group, and a Southern group. A regional coördinating committee of seven members, five appointed by the carriers and two appointed by the Federal Coördinator, was established for each group. These committees were charged with the duty of eliminating unnecessary duplication of services and facilities, permitting joint use of terminals, avoiding waste, and controlling various practices affecting service and operation. In the event of failure to reach an agreement, the Federal Coördinator was authorized to accomplish these ends, if requested by a regional committee. The Federal Coördinator was also directed to promote financial reorganizations and provide for the study of transportation problems. He was authorized to demand reports, and was given access to all carrier accounts and records. Appeal from decisions of the Coördinator could be made to the Interstate Commerce Commission by petition. So long as any carrier was affected by any order of the Coördinator, or of the Commission, the carriers were relieved from the operation of federal and state anti-trust laws. In 1935 Congress extended the office to June, 1936. Orders of the Coördinator, however, have effect until either vacated by the Interstate Commerce Commission, or set aside by other lawful methods. The law also contains several amendments to the Interstate Commerce Act, two of which are important here. The first sets aside the recapture clause of the 1920 law as described above. The second brings railroad holding companies within the jurisdiction of the commission by requiring the approval of the commission for all projected combinations or mergers of carriers by holding companies. If approval is

granted, the holding company must be considered a common carrier and is subject to federal regulation. At present writing, little progress has been made under this enactment. The scope of the Interstate Commerce Commission's control has been extended to cover all means of transportation doing an interstate business. This includes motor buses and motor trucks.

These two acts indicate a new policy in the regulation of railroads. The monopolistic nature of the railroad is frankly admitted, and consolidations are to be encouraged rather than discouraged. The right of the roads to fair earnings is recognized, and the commission's power of complete supervision is clearly established. We have committed ourselves to the policy of encouraging monopoly while rigidly controlling its activities. After the passage of the Act of 1920, the commission drew up a tentative plan for the consolidation of the railroad systems of the United States into nineteen major groups, but few consolidations have taken place. The difficulty arises in the disposition of those roads which are not strong. The task has proved so difficult to accomplish that in 1927 the commission, thru its chairman, stated that it would like to be relieved of preparing a final plan. The law of 1933 may prove more practical and secure better results. Some authorities are coming to the conclusion that only by means of government ownership can the railroad problem be solved.[13]

D. Public Ownership

Public Ownership in the United States.—We usually consider public ownership as something new and untried, but this is far from the truth. The greatest single business enterprize is the government itself. The federal post office is a great experiment in public ownership and the United States printing office is probably the largest printing and publishing house in the world. The Panama Canal and the numerous irrigation projects, such as the Boulder Dam and the Tennessee River Project, are large-scale enterprizes. Other forms of public ownership commonly lost sight of are public roads, schools, libraries, mints, and similar institutions.

Public ownership of public utilities is restricted largely to municipal governments. Three large American cities (Detroit, San Francisco, and Seattle), and numerous small ones own their own street-car lines. Advocates of public ownership have made much of the striking success San Francisco achieved in operating its street-cars. A private line, running in the same city during the life of the municipal line, paid lower wages to the men, worked them longer hours, had several disastrous strikes, and gave inferior service. The municipal line succeeded in establishing excellent labor relations with the men, and gave good service. The experiment about paid for itself on a five

[13] See Joseph B. Eastman, *Minority Report* at the Convention of National Association of Railroad Utility Commissioners at Dallas, Texas, Oct. 18, 1927.

cent fare, while other large cities in the country were forced to advance their rates, in some cases to as much as ten cents. The majority of municipalities own their waterworks. Over one-third of the electric light plants of the United States are municipally owned. Other experiments with public ownership include municipal gasworks, fuel yards, ice plants, markets, baths, and laundries.

Whether or not the many experiments with public ownership in the United States have been successful is still much disputed. An excellent study of the experience of eighteen California municipalities with public ownership of electric light and power distribution concludes that "none of the cities has any reason to regret the undertaking of such enterprizes."[14] Private utilities corporations have been vigorous in spreading propaganda condemning the system of public ownership. On careful examination, the data they submit is usually found to be both meager and woefully inaccurate. It is really astounding how many persons, including otherwise competent authorities, are willing to state emphatic opinions on the question of public ownership without even a rudimentary knowledge as to just what is being accomplished by public enterprizes actually operating. What is needed is a scientific survey by impartial experts seeking to discover, not only how many experiments are successful and how many are failures, but also to uncover *the reasons for specific cases of success and failure.* We shall discuss below the arguments for and against public ownership, but let us note at this point that the test of experience shows both successes and failures. Hence final judgment should at present be withheld. The general tendency has been towards a constant increase in the number of publicly owned enterprizes, rather than a decrease, but the weight of authoritative opinion appears to be that the American system of government falls far short of the requirements for effective operation of business enterprizes.

Public Ownership in Europe.—Opinion seems to be almost unanimous that public ownership has been a success in Europe. There the ownership of public utilities has proceeded to such a point that private enterprize has become the exception to the general rule. Waterworks are quite generally municipally owned. In England only one-fifth of the total remain under private management. Gasworks, electric light plants, street-car lines—and in Germany even slaughterhouses, land estates, mines, restaurants, and drug stores—have been included in the list of public enterprizes. Most of the German railroad lines are in the hands of the government and, in August 1937, a decree nationalizing French railroads ended private ownership in that country. In England, however, most of the railroads are still under private control. Many new experiments with public ownership are being advanced by the Fascist governments of Italy and Germany, and the Communist government of Soviet Russia. In the past the public enterprizes of Europe have maintained

[14] F. L. Bird and F. M. Ryan, *Public Ownership on Trial* (1930).

a high standard of efficiency. Municipalities have been able to obtain efficient public servants much more successfully than have the large cities of the United States.

The Use of the Corporate Form by Government.—The increasing use of the corporate form of business organization as an instrument of government control has far-reaching implications. While the federal government has long owned and controlled such services as the postal system, the use of the corporate device is a relatively new aspect of government activity. In Great Britain, the government has made use of the corporation in such enterprizes as the British Broadcasting Company and the London Passenger Transport Board; and in other European countries similar organizations have come into being, often with ownership in private hands, but control in the governments' hands. In the United States there are many corporations, the control of which lies with the federal government. The government may own all the stock, just part of it, or none at all, and yet control the corporation.

The fundamental idea behind the quasi-public corporation is social control by a method that is divested of as much politics as possible. While the government is the sole stockholder in the Tennessee Valley Authority,[15] for example, yet the latter is a legal entity apart from the government: it can sue and be sued, borrow money and engage in all the other activities of the private corporation. The part of government is the appointment of directors and the determination of policies. The T.V.A. directors hired engineers and experts in many fields to build Norris Dam, and these experts were supposedly not hired on a political basis, but on the same basis that a private corporation would hire them—for their ability to render the greatest amount of service for the least money.

Instead of the government directly regulating private enterprize, it can use the corporate device and become a competitor of private enterprizes, thereby setting up standards and on occasion compelling actions, not by fiat of the law but by economic necessity. Just how far this technique will be used in the future and what significance it will have is hard to predict, but here, at least, is a possible form of government-business relationship that is neither purely capitalistic or socialistic, and which may prove to be the answer to questions raised by both the other competing systems.

The Case for Public Ownership.—The proponents of public ownership do not claim it to be a panacea for all economic ills, but they believe that a comparison of the conditions existing under private enterprize with those which prevail under government enterprize—imperfect tho it may be —will show a net balance in favor of public ownership. Let us briefly sum-

[15] While the T.V.A. is not strictly a corporation, yet for all practical purposes it may be considered so. Other examples of government-controlled corporations are: the Reconstruction Finance Corporation, Home Owners' Loan Corporation, Federal Deposit Insurance Corporation.

marize the arguments urged in its support: (1) It is said that service will be cheaper under public ownership. The government, possessing a better credit rating than private concerns, can borrow money at a lower rate of interest and reduce the overhead charges. This saving, combined with the elimination of private profit, would permit reductions in the rates of service. (2) The service rendered by a public enterprize will be more satisfactory than that of a private enterprize. The private enterprize will extend its service only when an increase in profits is probable, whereas the public enterprize can assume obligations to render service deemed socially desirable, even tho a deficit occurs. We have already seen how the problem of handling the weaker railroads is hindering the consolidation of railways in the United States at the present time. (3) Public enterprizes, it is claimed, will eliminate a considerable portion of the political corruption that now occurs thru the efforts of the private corporations to obtain favor and protection from public authorities. Some political corruption may still exist, but its extent will be much reduced. (4) The general tone of government service could be increased, for the inducement offered men of ability to enter government service would be much greater if government ownership of industrial enterprizes were extended on a large scale. (5) It is claimed that government regulation encounters too many technical difficulties of administration adequately to protect the public from exploitation by public service corporations. Modern industry is very complex and the economic factors involved vary from industry to industry, presenting a task of regulation far too involved for any state commission to handle in a satisfactory manner. Public ownership simplifies many of these problems. For example, valuation questions that have harassed the courts and the public utilities commissions for a quarter century would almost disappear if the government owned the industries, for the exact determination of "fair value" would no longer be necessary for the fixing of rates.

The Case against Public Ownership.—The opponents of public ownership have been extremely aggressive. Public utilities corporations have spent large sums of money in popularizing the view that government ownership is everywhere a failure. The chief arguments raised are four in number: (1) It is said that the financial saving of government ownership is much exaggerated. The property of corporations cannot be confiscated; it must be purchased. Therefore government bonds are simply substituted for private securities, and the only public saving would be the lower interest rate (a reduction of perhaps 1 per cent) that could be obtained by the government in contrast with the rates obtained by private enterprizes. The loss of taxes now paid by the public utilities would have to be made up from other sources. (2) The efficiency with which the public utilities are operated would be considerably reduced. Private industry is generally believed to be more efficient than public. "No democratic community, with the possible exception

of Switzerland, has shown in its public industry a spirit of progress comparable to that of private enterprize."[16] The initiative necessary to introduce and develop progress in the arts would be sacrificed. (3) Political corruption would be increased, for the introduction of the spoils system into the field of public utilities would be disastrous. (4) The unsuitability of our form of government for public ownership of industry must be recognized. Governmental bodies today are not selected for the purpose of controlling or owning industry, and we may seriously question the possibility of obtaining, by the ballot, efficient business enterprizers, or superior officials. The most important question to a governmental official is reëlection—vote getting. Until we develop some form of governmental control to avoid this difficulty, public ownership on a large scale would prove a failure. (5) Finally, the critics point to the experience thruout the United States and the world with government ownership and call it a failure. A meeting of the National Association of Railway and Utility Commissioners of the United States went so far as to adopt a formal resolution that "Public ownership has failed wherever it has been tried."[17] This is of course a false statement, for there have been many experiments of outstanding success.

The Future.—At the beginning of the preceding chapter, we noted that three possible policies are open in the relation between government and business. They are: non-interference, regulation, and public ownership. Having completed a brief examination of experience with each of these policies in the United States, we should now be in a position to formulate conclusions that will serve as guides for future government activity. To begin with, past experience indicates that a non-interference policy is not to be considered. The complexity of modern industry has reached a point where the interference of the state is essential to protect the citizen from anti-social activity by business enterprizers. Narrowing the choice to one between governmental control and public ownership, there is much to be said on both sides. The best policy would be a working combination of the two. Experience with trust suppression indicates that it is possible to break up monopolies and maintain free competition, if that policy should be decided on. We often forget that many trust dissolutions, less dramatic than the Standard Oil and American Tobacco Companies cases, were effective at once; and even in these two famous cases, the passage of time has restored considerable competition. If, then, an aggressive attitude were assumed by the government, and *if the penal sections of the anti-trust law were enforced on those convicted of violating it,* the maintenance of free competition could be accomplished to a high degree. However, such a policy would sacrifice the advantages of monopoly, in order to free ourselves from abuses of its power. If possible, it would be far more sensible to permit the existence of

[16] F. W. Taussig, *Principles of Economics* (3d ed., 1921), p. 431.
[17] Quoted from Carl D. Thompson, *Public Ownership* (1925), p. 7.

monopoly when it is based on legitimate economies, and to exercise rigid governmental control over its activities. At the same time unfair competition should be prevented wherever competition still exists. For those industries affected with a strong public interest, and which cannot demonstrate their ability to serve the public interest under private enterprize, public ownership is the only solution.

These suggestions—rigid regulation of monopolies and gradual extension of public ownership where necessary—will of course open the door for further attempts at the corruption of public authorities. The efficiency and equity with which government intervention in industry functions cannot advance faster than the honesty, unselfishness, and sense of social responsibility possessed by public officials and the citizens behind them. Mere change in form of organization can accomplish but little unless it is accompanied by an advance in the standards of those persons elected to public office. The development of the commission form of control partly surmounts the difficulty of securing business experts under a democratic form of government, for the members of such commissions are appointed by executive authority and are responsible to the legislative bodies. Recent attempts to weaken the position held by commissions should be fought vigorously; the integrity and independence of the commissioners must be maintained at all cost.

Summary

Social control may be exercised in the form of trust elimination or of regulation; the first method has been used in the case of industrial trusts, and the second in the cases of railroads and other public utilities. The Sherman Anti-Trust law, passed in 1890, declared illegal attempts to restrain trade or establish monopoly. The law was but little enforced up to 1911, when the Supreme Court ordered the Standard Oil Company and the American Tobacco Company dissolved. The declaration of the court in these two cases, that only unreasonable restraint of trade was illegal, clarified the scope of the act and established a more definite basis for subsequent prosecutions. Today the trend of government interference is away from trust suppression towards a recognition of the advantages of large-scale production, under government regulation. This change in policy began with the passage of the Clayton Act and the establishment of the Federal Trade Commission in 1914. The latter body possesses powers of investigation, prosecution, and publicity. The National Industrial Recovery Act encouraged loose forms of industrial organization, but the act was declared unconstitutional.

The regulation of public utilities rests largely in the hands of the state and municipal governments. Most states have well established public utilities commissions. The federal Utilities Holding Company Act of 1935 was an

attempt to curb the abuse of that form of business organization in the utility field.

The railroads, constituting quasi-public enterprizes of very great importance, have long been carefully supervized by the government. Abuses in the operation of the railroads led to the passage of the Interstate Commerce Act and the creation of the Interstate Commerce Commission, with definite regulatory powers, since increased by subsequent legislation. During the World War the federal government operated the roads. This experiment was successful in so far as technical operation was concerned, but there is some doubt as to its success from the financial side. The Transportation Act of 1920 provided for the return of the road to private owners. The Interstate Commerce Commission was ordered to fix railroad rates to yield a fair return on the value of the roads and also to assist in the establishment of voluntary consolidations of competing lines. The Emergency Transportation Act of 1933 authorized the division of the railroads into three groups, created the office of Federal Coördinator, and brought the holding company under federal control.

Public ownership of public service corporations is spreading in the United States, but the degree of success achieved has been much disputed. In defense of public ownership it is said that service will be cheaper and more satisfactory, political corruption will be reduced, the tone of public service will be improved, and the technical difficulties of a policy of government regulation will be avoided. Against public ownership it has been charged: that the possibility of a financial saving has been much exaggerated; that the efficiency with which industry is operated would be reduced; that political corruption would be increased; that our government is not suited to the operation of industry, and experience indicates probable failure. Our study of the problem of the proper relation between government and industry leads to the conclusion that (1) the state should undertake to prevent unfair competition, and (2) to carry out the rigid regulation of monopolies, while (3) public ownership of those industries affected with a public interest will be necessary where private enterprize fails to function properly.

SUGGESTIONS FOR FURTHER READING

For a comprehensive account of the institutional relationship between business and government in the United States, see Rohlfing, Carter, West and Hervey: *Business and Government* (1938 ed.). Stuart Chase's *Government in Business* (1936) is a popular account of the same subject. Two interesting and useful analyses are John M. Clark, *The Social Control of Business* (1926), and A. C. Pigou, *The Economics of Welfare* (1932 ed.).

Excellent studies of the problem of industrial combinations are R. E. Curtis, *The Trust and Economic Control* (1931); F. A. Fetter, *The Masquerade of Monopoly* (1931); M. W. Watkins, *Industrial Combinations and Public Policy* (1927); and Eliot Jones, *The Trust Problem in the United States* (1922). For a

discussion of railway regulation see Eliot Jones, *Principles of Railway Transportation* (1925); E. R. Johnson and T. W. Van Metre, *Principles of Railroad Transportation* (1916); and Frank H. Dixon, *Railroads and the Government* (1922). W. M. W. Splawn, *Government Ownership and Operation of Railroads* (1928) is a comprehensive survey of experiences of all countries. A useful compilation of court decisions and laws is that of A. R. Ellingwood and W. Coombs, *The Government and Railroad Transportation* (1930).

Morris L. Cooke, in *Public Utilities Regulation* (1924), covers in a very satisfactory manner the field of public utilities regulation. See also J. Bauer, *Effective Regulation of Public Utilities* (1925); M. G. Glaeser, *Outlines of Public Utility Economics* (1927); and Cassius M. Clay, *Regulation of Public Utilities* (1932). A vigorous defense of public ownership is that of Carl D. Thompson's *Public Ownership* (1925). *Municipal Ownership* (1917), by the same author, gives a summary of the extent of municipal ownership in the United States and Europe. F. C. Howe, in *European Cities at Work* (1913), discusses the development of public ownership in Europe. F. L. Bird and F. M. Ryan, *Public Ownership on Trial* (1930), is an excellent study of experience in California with municipal ownership. A well-written and somewhat sympathetic treatment of public ownership and public control is that of Frank W. Taussig, in his *Principles of Economics* (3d ed., 1921), Chap. LXIV. For strong criticisms of public ownership see Yves Guyot, *Where and Why Public Ownership Has Failed* (1914). Both sides of the controversy are well presented in the *Annals of the American Academy of Political and Social Science, Power and the Public,* Vol. 159, Part I, Jan. 1932. See also article by Stacy May, *Government Ownership,* in *Encyclopedia of the Social Sciences.* A very comprehensive study of the use of the corporate form by government is John Thurston's *Government Proprietary Corporations in English-Speaking Countries* (1937).

PART VI

COMPREHENSIVE PROGRAMS OF ECONOMIC POLICY

CHAPTER XXVII

LIBERALISM

A. The Theory and Program of Economic Liberalism

Comprehensive Programs Contrasted with Particular Measures of Reform.—Heretofore, in considering the problems which confront the industrial world, we have proceeded on the assumption that each problem could be met by particular measures designed to correct it, without changing the basic structure of industry itself. We have taken the broad outlines of the existing order, such as the institution of private property, the price system, and individual freedom of enterprize, pretty much for granted. A program for the improvement of society, however, must not ignore the fundamental institutions and the broad plan of organization which underlies the industrial system as a whole. It must be based upon some general principle or principles which are held to be most suitable as the foundation upon which to erect a social structure. There are three comprehensive plans of social organization which have been proposed for such a foundation. These are *liberalism, socialism,* and *anarchism*. Each presents a different scheme of social organization. Liberalism exalts the individual, believing that the social order should be so constructed as to permit the greatest degree of personal liberty. Hence it is also called individualism. Socialism includes a number of plans which differ considerably in details, but which agree in upholding the collective ownership and control of industry. Hence the term collectivism is sometimes applied to them. Anarchism is an extreme form of individualism which would do away with the state and all other forms of coercive authority.

The program of the anarchists is so visionary and violent that it is not taken seriously by most careful thinkers. We shall therefore discuss it only incidentally. Liberalism and socialism are the two chief contending systems. Both have been defended so ably by their advocates that they have received a great deal of serious consideration. We shall analyze them with some care in this chapter and the two which follow. Then, in concluding our study of applied economics, we may review the proposals which have been presented from time to time in this volume, in order to see whether they are consistent with either one of these opposing systems. We shall find that they are not based exclusively upon either liberal or

socialistic principles (for it is not necessary to accept either of these systems in its entirety), but it is hoped that they will reveal sufficient unity to constitute an effective program of economic reconstruction.

Natural Rights and the Social Contract.—The earliest forms of strong state or national organization were autocratically governed. Power was in the hands of militaristic monarchs or the nobility, while the masses of the people were held in subjection under conditions of slavery or serfdom. They were oppressed and exploited by the ruling classes, and they had few rights either civil or economic. Both the person and the property of an individual were subject to the whim of the authorities. Taxation was arbitrary and excessive. One could be thrown into prison on the slightest pretext, and the condition of the common people was in every way deplorable. In its early aspects liberalism was a reaction from this condition. As a philosophy it was developed by such thinkers as Locke and Rousseau, who denounced the oppression of the masses and defended the freedom of the individual. These writers argued that, prior to the development of a strong social organization, men lived in a state of nature in which each one was free to do as he chose. In such a state he enjoyed certain rights, such as liberty and property. Having such an origin, these rights should be regarded as natural and just. The state of nature, however, was unsatisfactory because, in the absence of any superior authority or collective organization, each individual could defend his rights only by might, and his enjoyment of them could be interfered with by the aggression of another. The state of nature was chaotic and intolerable, and therefore men were supposed voluntarily to have entered into a social contract with each other, or with their sovereign, by which a state was organized. The contract was a tacit understanding, rather than a formal agreement, but it was held to be none the less real. Men surrendered to the state such of their liberty as interfered with the equal liberty of others. The state then became charged with the duty of protecting each citzen in the enjoyment of his natural rights so long as they did not interfere with the equal enjoyment of others. Natural rights were relinquished in favor of civil rights maintained by the state, but the citizen did not give up any more of his natural liberty than was necessary to the maintenance of order and the protection of each from the aggression of others. In this way the social contract theorists were able to argue that state encroachment on individual liberty was not justified and that the fundamental rights of life, liberty, and property should not be infringed.

While this theory was of service in combating the oppressions of autocracy and helpful in establishing democratic government, it was based on inadequate reasoning. There is no evidence that there ever was such a state of nature as the one pictured by these philosophers, nor that men had in the beginning any rights at all. There is no law of nature which decrees what

rights human beings possess, nor is it conceivable that there are any rights which cannot be infringed if the interests of society demand it. We have already seen the truth of this criticism in our discussion of inheritance. It is further supported by our analysis of the powers of government. The only sound standard for social policy is one that is based on reason. An appeal to vague, allegedly "natural" principles is not convincing. On this account later philosophers gave up the doctrine of natural rights, but in doing so they did not give up the belief in personal liberty which had been defended by the social contract theorists. Instead they sought to find a new justification for it by proving it to be in the interests of the social welfare.

The Greatest Happiness Principle.—Jeremy Bentham, an English moral philosopher of the later eighteenth and early nineteenth centuries, found such a justification in the principle of "the greatest good to the greatest number." He held that social policy to be best which would bring the greatest happiness to the largest possible number of persons. All individual rights were to be exercized subject to this principle. Society might restrict the rights of some of its members, if by so doing it could contribute to the happiness of a greater number. Happiness, he said, consists positively in the presence of pleasure, and negatively in the absence of pain. An act is good which increases pleasure or decreases pain, and the relative merits of any policy may be weighed quantitatively by comparing the relative amounts of pleasure and pain they entail. One person's pleasure he considered just as important as another's; no one was to be preferred. Hence he placed the emphasis upon equality and individualism. He then proceeded to defend the view that the greatest happiness of the greatest number can be promoted by permitting individual liberty. This argument was based very largely upon economic grounds, and it was further developed by the classical economists into a body of doctrines which constitute the essence of economic liberalism to this day. We must consider this reasoning in some detail.

Economic Liberalism.—The liberalism of Locke, Rousseau, Bentham, and their school was a broad philosophy applicable to all phases of social life. In its political aspect it was the basis of democracy, and it succeeded in overthrowing the autocratic governments then prevailing and setting up democratic governments in their place. The French Revolution and the American Revolution were both manifestations of its working. The American system of government, and especially the Bill of Rights contained in the amendments to our Constitution, are largely based upon its principles.

While economic liberalism developed out of this general philosophy, it was more specifically a revolt against the Mercantilistic economic beliefs of the eighteenth century. We have already seen (Chapter XXV) how Mercantilism upheld the principle that national wealth could best be promoted by state regulation of industry, and especially of international

trade. We are familiar with its emphasis on money, its advocacy of protective tariffs designed to establish a favorable balance of trade, and its detailed restrictions on every aspect of industrial life. Adam Smith, the founder of political economy, was greatly influenced by Bentham's philosophy. By applying his reasoning to these restrictive measures he was able to advocate a policy of governmental non-interference in industry which would permit freedom of enterprize and allow each individual to follow his own self-interest in economic affairs. This emphasis on individual liberty in industry was further supported by Smith's successors, and it constitutes the essence of economic liberalism today. Hence *economic liberalism* may be defined as *that system of industrial organization in which free enterprize and competition prevail.*

Emphasis must be placed upon this definition because in recent years there has been some tendency to employ the word "liberalism" in a sense somewhat different from its original meaning. At the time when liberal doctrines were first pronounced they represented a protest against the existing order; for the existing order, as we have seen, was one in which very little liberty prevailed. Hence liberals were dissenters. This caused the term liberalism to be associated with any views in conflict with the *status quo* in society, and it is often used in this way today. We have a "liberal" movement in art which seeks to replace conventional forms by such novelties as futurist or cubist pictures. In religion the modernists, who combat the established fundamentalist doctrines, are also known as "liberals." By a strange inversion of terms the word has even come to be applied to reformers who seek increasing government regulation in industry to correct industrial evils—a use of the word which is the very antithesis of its original meaning. Historically and etymologically, however, liberalism implies the principle of liberty or individual freedom. It is in this sense that we shall use the term.

Self-Interest.—Let us now see what is the reasoning by which the principle of economic liberalism is defended. Liberalists lay great stress upon the part played by self-interest in governing the behavior of men. If an individual is free to do as he pleases, he will choose that course of action which promotes his interests best. In economic affairs this means that he will seek to do that which will bring the greatest income with the least expenditure. This is simply the Benthamite principle of pleasure and pain in an economic form, income being the equivalent of pleasure and outgo the equivalent of pain. This implies the existence of a carefully calculating "economic man"—that mythical creature who has played so prominent a part in the classical system of economic doctrines. Liberalism does not necessarily imply that everyone calculates his pleasures and pains to a nicety, however. It merely asserts that each person knows his own interests better than anyone else and that he is more likely to look after

them. At first thought this emphasis upon self-interest may appear to put a premium on selfishness, which may be expected to lead to anti-social conduct. Liberalists believe, however, that the welfare of all will be best promoted if each looks after his own interests, and they seek to show, by a line of reasoning presently to be set forth, that there is no essential conflict between the interests of the individual and those of his fellows.

Competition.—Liberalism places great reliance upon competition as the stimulus to efficiency and the protection of each individual against exploitation by others. Where there is free enterprize and freedom of contract, each one will seek to enter into the arrangements which are most profitable for him. This leads to competition among individuals to secure the best advantages. There will be competition among consumers seeking to buy and among producers seeking to sell. The influence of the first is to raise prices, and of the second to lower them. The resulting equilibrium price is one that is fair to both producers and consumers. In fact, the whole price system of modern society is regarded by the liberalists as a demonstration of the effectiveness of their principles. They reason, as we did in Chapter XII, that this system makes for economy. Competition sets high prices upon those goods which are most in demand and low prices upon those which are least in demand. Production is thereby directed into the most important channels.[1] This economy permeates the whole industrial process, leading enterprizers to enter those industries which offer the greatest prospect of profits, inducing capitalists to invest their savings where the demand for them is greatest, and guiding land and labor to their most productive uses.

We may think of competition as a cruel and unethical struggle, but the liberalist looks at it as an effective process for the promotion of economy and efficiency. We cannot escape from it in any case, for competition is an inevitable result of scarcity. So long as the means of production are scarce, all wants cannot be satisfied, and the desire of each individual to gratify his own desires to the utmost brings him into inevitable conflict with his fellows. Professor T. N. Carver, a staunch contemporary liberalist, says that the question is not whether we shall have competition or no competition, but what kind of competition. If we have socialism, which is the alternative to liberalism, competition will be political, for economic questions will be decided by a democratically governed state instead of by prices. The state authorities must follow the vote of the people, but prices follow consumers' price offers. People spend their incomes more wisely than

[1] If we observe that production is for those who can pay the most rather than for those who have the greatest needs, the liberalist replies that the wants of the former are most important, or their incomes would not be larger; for distribution is in accordance with productivity. This argument, however, is untenable in view of our reasoning concerning inequality. It is especially vitiated by the presence of unearned incomes. Hence our criticism of liberalism on page 601.

they vote, he believes. Therefore, prices are likely to prove superior to ballots as a guide for production. He also contends that industry is more democratic than any government. It gives a more open road to talent, for the business man with vision needs only to command a small following of intelligent buyers to succeed with his project, while the political leader must convince the unintelligent majority. It is also more sensitive to popular will, because the consumer can spend as he chooses and can withhold his patronage from a business man if he does not like his wares, but he must accept the services of government and pay taxes for their support whether he likes them or not. Finally, he alleges that economic competition is not as wasteful as political, for the terrific cost of campaigning is more excessive than the failures and inefficiency of private business.

Liberalists further claim that competition leads to a process of natural selection by which each individual will find his level in that position which he is best able to fill. Those who are capable of leadership and executive organization will become successful enterprizers, where they will be in the best position to exercize these qualities. The inefficient business men will be weeded out by the simple process of failure. Those who are best fitted for employment under the direction of somebody else will naturally become wage-earners. Employers will compete with each other to secure the most efficient workers, so that each laborer will find that place in industry where he can contribute service of the greatest value. The relative wages paid in different employments will induce each to do the highest type of work of which he is capable.

The Defense of Distribution.—According to liberalism, the system of distribution which results from the competitive pricing process is a just one. It pays each according to his productive importance or worth. This is interpreted to mean that each is rewarded in proportion to the social service he renders. This is alleged to be the best principle of distribution, because it is the most economical. We learned something of the economy of this process in Chapters XX and XXI. According to the analysis there presented, those agents of production are paid most which are most scarce in proportion to the demand for them. This setting of high prices upon those agents which are most scarce we found to have three important effects: (1) It stimulates the growth of those agents which are most needed in industry. High interest rates encourage saving. High wages encourage young men to undergo training for skilled occupations. High rents stimulate the conversion of land from less productive to more productive uses. (2) It stimulates the employer to use them with a minimum of waste. That means not only that he will exercize careful oversight in their management, but that he will never use an expensive agent to do work which might be performed by a less expensive one. (3) The prospect of profits encourages the enterprizer to efficiency. On these grounds the liberalist

justifies much of the inequality of incomes which now prevails in society. We shall learn presently, however, that some liberalists find it consistent with their principles to suggest measures which would lead to a reduction of inequality.

The Harmony of Individual and Social Interests.—Since the effects of competition and the price system are so beneficent, liberalists conclude that the alleged conflict between the interests of the individual and those of society is more apparent than real. Adam Smith said that each person, in following his self-interest, is led "as if by an invisible hand" to promote the interests of society also. Selfishness in economic matters is believed to accord with altruism. The self-seeking individual tries to maximize his gains. His greatest profit is to be found by producing that which is most demanded. So his need is reconciled with that of his customers. His profit is but the just price of the service he renders to them. The whole system of division of labor and exchange is a coöperative undertaking in which each is producing for all and all for each.

A French school of liberalists, led by Frederic Bastiat, carried this belief in the harmony of individual and social interests to absurd lengths. Bastiat sought to rid economics of every doctrine which revealed any element of discord or pessimism. He attacked the law of population because it threatened a fall in wages, and the law of rent because it threatened to increase the unearned incomes of landowners. He built up an entirely new system designed to show the harmony of interests in society. Like most persons who seek to reach conclusions that agree with a preconceived bias, his results are lacking in scientific merit and have been generally discredited. His school, sometimes called the Optimists, no longer has a following, and his doctrines are not relied upon by modern liberalists as the basis for their philosophy.

The Defense of Private Property.—The institution of private property is regarded as part of the system of liberalism, for liberty is construed as implying freedom to acquire property by production, occupation or exchange, and to dispose of it as one likes—so long as it is not wrested by force from someone else. Professor Carver says that "property exists automatically and necessarily in any group where the individual is safeguarded against violence. If he is safeguarded against violence, he may hold anything in his possession until he sees fit to give it up of his own free will. If anyone who tries to dispossess him by violence is promptly repressed by the group, that very act on the part of the group safeguards him in his possession,—it transforms his possession into property."[2] Some have held that liberty involves the right of property, because property is necessary to the maintenance of personal independence. But this would require that everyone should own some wealth—a condition

[2] T. N. Carver, *Principles of National Economy* (1921), p. 104.

that is not realized under a system of liberty and free enterprize. It would lead to a criticism of the institution of property as it now exists. Liberalists, however, usually defend it pretty much in its present form.

Early liberal teachings regarded the private ownership of wealth as one of the natural rights which were assumed to be original and inviolable, but with the abandonment of the natural rights doctrine a justification of it on other grounds was sought. Some argued that every man was entitled to the product of his own labor, and that this was the basis for the right of property; but not all property can be established in this way, for much of it is not due to the labor of its owners; some of it is not the product of labor at all. The chief defense now relied upon is based upon considerations of social utility, as we learned in Chapter XXV. The private ownership of wealth is said to lead to its most effective utilization. The superiority of farming when carried on by proprietors over that which is carried on by farm tenants is cited in proof of the contention that property-owners are the ones most likely to administer wealth with care and economy. That which is common property is too often regarded as no one's property, and treated with neglect or abuse.

Laissez-Faire.—Believing that the force of self-interest promotes the most efficient and equitable economic system, the liberalist opposes any great measure of intervention in economic matters by the state. The more the state regulates industry the more it encroaches upon the liberty of the individual and obstructs the economy of natural economic laws. Liberalism, therefore, advocates that policy of non-intervention, or *laissez-faire,* which we have already encountered in our discussion of government. Business is to be let alone as far as possible. State participation in industry is obnoxious, for it can only interfere with the beneficent operation of spontaneous economic forces. Nor should the government undertake to operate industries of its own. Government ownership is taboo, for government industry is inefficient and wasteful.

Liberalists recognize that some state organization is necessary, but they believe its functions should be kept down to a minimum. Where industry is concerned, the state should play the part of a referee rather than that of a participant. It is like a baseball game in which certain rules have been laid down as necessary for the maintenance of fair play. The umpire is charged with the task of seeing that these rules are enforced, but the actual playing is left entirely to the members of the teams. So in industry, it is the rôle of the state to see to it that free and fair competition is maintained, but to interfere as little as possible in the actual conduct of business. The state should enforce the fulfillment of contracts once made, prevent actual dishonesty, break down monopolies, and the like, but it should not fix prices, prescribe the details of product or policies, nor operate industries of its own. Some liberalists have attempted

to outline the functions which the state may properly exercize, without encroaching on individual liberty, as follows: It should provide armies and navies for the national defense. It should establish courts, a police force, and other machinery for the settlement of disputes, the enforcement of contracts, and the punishment of crime. It may also undertake to provide certain public facilities which could not be furnished at a profit by private individuals, but which are nevertheless important for the social welfare. Among such activities are the maintenance of public parks, schools, and roads. Where monopolies exist, inasmuch as they offend the principle of free enterprize, the state's duty is to break them up. But beyond such bounds as these it is unwise for it to go.

It has already been stated that some writers, who profess to be liberals, interpret the legitimate functions of the state as much broader than these, but it may be doubted whether their views can properly be designated as liberal.

Liberalism and the Present Industrial System.—In non-economic affairs the triumph of liberalism has been most complete, and its principles are seldom seriously questioned. Personal liberty, such as protection from arbitrary imprisonment, security of property, freedom of contract, the right of assemblage, free speech, freedom of the press, toleration of various forms of religious worship, and the like, are now formally recognized and reasonably well maintained by all enlightened governments. Their exercize is subject to certain considerations of public welfare, as we have seen, and they are likely to be somewhat curtailed in time of war, but they are not seriously interfered with in times of peace. They are fundamental guarantees written into the constitutions of the federal government and most of the states in this country. Along with them has gone the idea of universal suffrage and democratic government. Equality of the sexes in most matters has now been achieved. In many respects, therefore, the present social order is one of individualism, where liberty reigns supreme.

In economic matters, also, liberalism has had great influence. The present economic régime, which is commonly known as *capitalism,* partly realizes most of its essential features. The distinctive characteristics of capitalism are usually designated as free enterprize, competition, and private property. Substantial freedom of enterprize and freedom of contract exist. An individual selects his own occupation and is free to accept or quit his employment. He has similar liberty of action in the investment of his capital. He may set up his own business if he desires. Competition also is widely prevalent. There is competition among producers, both as to prices and services. There is similar competition among buyers. We rely mainly upon such competition to secure good service and fair prices. We also have free markets and a spontaneous price system which operates,

for the most part, without supervision or control. We depend upon the balance of supply and demand in these markets to direct production into its proper channels. We also depend upon the price system to distribute the product, in accordance with the marginal productivity principle of distribution. Finally, most of the land, industrial establishments, and consumers' wealth, are privately owned.

Notwithstanding these characteristics, the present economic order is at variance with liberalism in some respects, and is departing further from it all the time. In the later eighteenth and early nineteenth centuries the doctrines of Adam Smith and the classical economists succeeded in breaking down the restrictions of government which hampered industry, and a régime of almost complete *laissez-faire* was ushered in. We know that since then, however, changes have taken place, so that what we now have is, in effect, a compromise with liberalism. Our system differs from one of pure liberalism in two important ways. In the first place, we have a very large measure of state regulation in industry. In the preceding chapters, many forms of such regulation, now in effect, have been described. We have extensive control of banking, thru the Federal Reserve Board and the Federal Reserve Banks. We have protective tariffs, which interfere with the free movement of goods in international trade. We have enacted a great deal of labor legislation, such as that fixing the minimum age at which children may work, limiting hours of employment for women, prescribing standards of sanitation and health in factories, establishing minimum wages, and the like. We have workmen's compensation acts, and many European countries have universal systems of compulsory workingmen's insurance. We have pure food and drugs acts, which definitely prescribe standards of quality in the manufacture of important commodities. We fix the rates which public utilities may charge for the services they render to the public. We have many state enterprizes, such as waterworks and street railways. In some countries there is national ownership of the railroads. In the second place, we have a considerable amount of monopoly, especially in this country. There is the widespread development of trusts, which have attracted so much attention in recent years. Where there have not been formal combinations, monopolistic practices have been brought about thru informal price agreements, trade associations, and the like. Even in the field of labor we have closed unions, which maintain monopolies of their trade. No one can say to what extent monopoly has succeeded competition, but many writers believe that this development has gone so far that business is no longer primarily competitive.

Because of these differences we cannot speak of the present régime as one of liberalism. In fact, putting a liberal program into effect in the United States today would mean substantial changes in our present eco-

nomic arrangements. We would have to curtail drastically most of the measures of government regulation which have been developing in the past few decades. Such organizations as the Federal Reserve Board, the Interstate Commerce Commission, the Public Utilities Commissions of our various states, and the Federal Trade Commission, would have to be abolished, along with many other activities of government. All our protective tariffs would have to be repealed, to be replaced by complete freedom of international trade. All existing monopolies would have to be broken up, to be replaced by smaller competing units. We shall see also, as we go on, that some liberalists advocate changes even more sweeping than these as essential to the maintenance of liberalism.

Liberalism and Anarchism.—In some respects liberalism resembles the doctrines of the anarchists. Anarchism is individualism carried to its logical extreme. Anarchists believe that human beings are essentially intelligent and socially minded. They believe that if free to follow their own impulses, without coercion from government, they would naturally coöperate, and many of the evils now found in society would disappear. The two systems are alike, therefore, in exalting the individual and in advocating the reduction of governmental functions to a minimum. They differ, however, in that anarchism would abolish *all* government, whereas liberalism would retain most of it. Anarchists do not believe in binding contracts nor in coercive authority of any kind. Liberalists believe that coercion is essential to the fulfillment of contracts and the maintenance of peace and honesty. Anarchists would also abolish the institution of private property, while liberalists would retain it. Anarchists believe in violent revolution, while liberalists do not. Liberalism is essentially conservative, for it would preserve most of the characteristics of present society. Anarchism is radical and would overthrow most existing institutions. In spite of the similarity of some of their doctrines, therefore, the two systems are very different.

B. A Criticism of Liberalism

The Merits of Liberalism.—An impartial critic must recognize that there is a great deal of merit to much of the liberalists' reasoning. It cannot be denied that the self-interest of people is a powerful motive to achievement, and that under the spur of individual initiative tremendous progress in production has been made. The same is true of competition. Enough has been said in other chapters to give force to the argument for free markets and the price system. The institution of private property, too, responds to a deep-seated desire of human nature, and promotes the accumulation and care of wealth. When one considers the alternatives to these things, one may hesitate to discard them.

Yet they constitute a good not wholly unmixed with evil. Capitalism has not adopted them in their entirety, because circumstances have revealed the necessity for their modification. Still further modification may be necessary before we can give them our approval. A critical analysis of the features of liberalism reveals weaknesses which are not at first apparent.

The Inadequacy of Self-Interest.—One weakness is the reliance which it places upon self-interest. It assumes that if individuals are let alone, their self-interest will lead them to do the thing which conduces both to their own welfare and to that of society. Our discussion of consumption in Chapter III, however, would indicate that we should not place too much confidence in the ability of individuals to look after their own interests as consumers. People are often ignorant or unwise in the expenditure of their incomes. They adopt unintelligent habits, such as the use of alcohol. This may make it wise to protect them by such measures as prohibition. They may be misled by untruthful or otherwise undesirable advertizing. This indicates the need for control to correct this difficulty. Lack of standardization of consumers' goods may make it impossible for a consumer to know just what is the quality of the merchandize he is purchasing. The state may properly take measures to secure such standardization. The tendency to adulterate food and to manufacture shoddy merchandize makes it the duty of government to protect the consumer from these abuses.

There is also good reason to believe that we cannot rely upon the individual to protect his own interests as a producer. The numerous failures which occur in business, all of which involve waste of productive power, are sufficient to prove that not all business men can pursue their self-interest intelligently. The truth is, modern industry is so complex and uncertain that the individual enterprizer has not enough information about the state of the market and its future prospects to guide his policies satisfactorily. Frequent overproduction in this or that industry results, while periodically there is the general breakdown of crises and depressions. These serious maladjustments point to a need for greater coördination and central planning in industry which is hardly consistent with the maintenance of a large number of competing individual enterprizes. Such difficulties can hardly be corrected without an increasing amount of combination among producers, and this will necessitate more government regulation to prevent abuses. Some writers believe that eventually we must have some sort of state machinery for the central planning and direction of industry as a whole.

Again, we cannot depend upon self-interest to protect the welfare of the wage-earning classes. Laborers are often too ignorant to know how their well-being can best be promoted, or they are at such a disadvantage in bargaining that they cannot protect themselves from exploitation. We

have seen how the underpayment of sweat-shop employees may justify the enactment of minimum wage laws. We have seen how the state has found it necessary to protect women and children employed in industry. Laborers themselves have met their problems by trade union organizations, which are essentially a departure from the principle of individualism. These unions should be supported, but regulated. These considerations suggest that individual action must be supplemented by collective action, if true social welfare is to be promoted. The principle of self-interest is valuable, but it cannot be exclusively relied upon.

The Inadequacy of Competition.—Liberalism is based upon a belief that freedom of contract and the force of competition will assure to each individual his just due. His reward will be commensurate with his service, and consumers will be protected from extortion. Unfortunately, these arguments have been effectively disproved by the facts of history. In a previous chapter we saw how, in the early days of the Industrial Revolution, a *laissez-faire* policy was adopted in England. Intolerable industrial conditions developed under this policy. Factory labor was exploited to the limit. Men, women, and children worked from sunrise to sunset, for miserably low wages, and lived in conditions of utmost poverty and squalor. The terrible conditions which prevailed convinced legislators of the necessity for intervention, and it was for this reason that labor legislation, which interfered with the laborer's "freedom of contract," was resorted to. Under free competition, also, business practices of a very questionable sort prevailed. This has been abundantly illustrated by the history of American finance in the past generation. The development of corporations in this country has been attended by all kinds of chicanery and fraud, and many of the millionaires of a generation or two ago amassed their fortunes by competition of the most brutal and unfair sort, not infrequently accompanied by downright dishonesty. Competition, when unrestricted by regulatory laws, does not protect the consumer from deception or extortion, the investor from swindling, nor the high-minded business man from the unfair methods of his unscrupulous rivals. These things can be attained only by collective control.

One might suppose that such collective control need not be contrary to the principles of liberalism, for liberalists themselves suggest government interference as necessary to maintain free and fair competition. Under modern conditions, however, the measures necessary to achieve these ends involve such extensive regulating bodies that they are hardly compatible with the principles of liberalism. It becomes necessary to dictate what kind of accounts business men shall keep, what prices public utilities shall charge for their services, and many other details. It is even doubtful whether competition itself can be maintained, or whether in the interests of economy, its further maintenance is desirable.

There are three reasons why competition fails to regulate business

satisfactorily. For one thing, unscrupulous business men lack the ethical standards essential to fair competition. So competition, instead of being a dignified effort to secure business by offering superior products and effecting greater economies in production, too often becomes a ruthless struggle to suppress one's rivals by vicious means. In the second place, free competition is not necessarily equal competition. In Part IV we discovered that many people are given a better start in life than their fellows, by inheriting wealth or enjoying the influence of powerful relatives or friends. Obviously, he who has capital to begin with is in a better position than he who has not. At the other extreme are persons inadequately equipped for the industrial struggle by lack of education or pecuniary means. Their ignorance and weakness puts them in a position where they can be exploited by their more fortunate fellows. In other words, competition bestows its prizes upon the strong and the lucky at the expense of the weak and unlucky. This destroys the connection between reward and service which is assumed to exist by the liberalists. Thirdly, competition is so distasteful to the competitors that, sooner or later, they seek to escape it by establishing a monopoly. Liberalism would break up such monopolies, enforcing the maintenance of competition in industry. The discussion of integration in Chapter V, however, and of government policies toward monopoly in Chapter XXVI, raises grave questions as to the advisability of this solution. Competition involves waste in the duplication of plant and lack of coördination between the various processes of production. Combination eliminates useless plants and so integrates the successive stages in the productive process as to stabilize markets and assist in the continuous utilization of all the labor and capital available. Such being the case, the program calculated to secure the greatest efficiency in industry is one of regulated monopoly rather than of enforced competition. This is incompatible with the system of liberalism.

We have seen that liberalists defend competition as a means of natural selection which brings the efficient leaders to the top in industry. This may be questioned. We have already noted that free competition is not equal competition. Only if competition were equal could we be sure that the fittest would be the ones to succeed. Even then we would have to ask "Fittest for what?" Industry judges of fitness by money-making power. Profits is the criterion of success. Can we measure the social service of an individual by his ability to make money? Some of the most gifted persons, such as the artistic genius or the inventor, receive the poorest rewards. The painter lives in his attic, and his work is not recognized until after his death. The inventor may live in poverty, while some capitalist enterprizer reaps a fortune from the marketing of his contrivance. We have seen that profits are often made in evil ways. They may represent the exploitation of employees or consumers. In view of these things,

it is by no means certain that competition selects those who are really fittest to contribute to social welfare.

Some Defects in the Price System.—Liberalism relies upon prices as the guide to production. In Chapters III and XII we showed that, while the price system can be made to work satisfactorily, this cannot be done without some intervention. Until consumers are more intelligent and more adequately protected from deception and shoddy merchandize than they are now, their choices, as expressed in their expenditures, will not truly indicate the real utility of commodities. A greater difficulty is the fact, several times previously stressed in this volume, that consumers do not have equal purchasing power. Liberalism would perpetuate much of the present inequality of incomes. This means that the demands of the rich for merchandize of trifling importance will exercize more control on production, thru prices, than important wants of the poor. The price system will never be a satisfactory guide to production until a greater equality in incomes prevails. Our analysis of this problem indicates that its solution requires increasing measures of intervention. Finally, the successful operation of the price system requires great mobility among the agents of production. A change in the demands of consumers will not bring about corresponding changes in production, unless labor and capital are free to move from one employment to another. The presence of fixed, specialized capital in industry, and the well-known immobility of labor, interfere with this flexibility. As a result, serious maladjustments between supply and demand occur. It is true that these will correct themselves *in time* thru the operation of the price system, but not without much loss and suffering. Intervention, in the form of more intelligent control of production, might prevent many of these maladjustments, or hasten their correction when they occur.

The Inadequacy of Distribution.—Liberalism defends the present system of distribution in its essentials. But in the three chapters of Part V we have found much to criticize in this system. We will not repeat the criticism here; it is enough to recall that the great inequality which results under the present régime was found to be undesirable, particularly in view of the fact that many incomes are not earned. This means that payment is received without the rendering of a corresponding service to the community. So long as this is the case, the harmony of individual and social interests, alleged to prevail under liberalism, is a myth. Our program for the correction of inequality calls for considerable intervention which is not compatible with the principles of liberalism.

A Criticism of Private Property.—The liberalists' defense of private property cannot be accepted without qualification. When it could no longer be justified as a natural right, or as the product of the labor of its possessor, its position became very vulnerable. If its validity rests upon

its social usefulness, the right can be restricted, and ought to be, in every case where no social welfare is promoted by it. We have seen that there are many cases where wealth is acquired without the rendering of service. These cases can no doubt be corrected without abolishing the institution of private property itself. But we have found other cases where the public interest demands ownership by the state for the sake of unified operation of important industries, the conservation of resources, or other considerations of welfare. The desirability of private ownership as a general principle is not denied; but it cannot be regarded as an inviolable right.

Modified Liberalism.—Modern liberals recognize some or all of these defects, but they believe they can be corrected without departing from the really essential principles of liberalism. The essential thing, as they see it, is to preserve the substance, rather than the appearance, of liberty. They do not object to measures of control of business, which, while apparently interfering with free enterprize, really promote this end. They believe that many of the defects of *laissez faire* arise out of the fact that liberty is in fact restrained and equal competition prevented by institutions which prevail under that policy. Changing these institutions, therefore, would not be a departure from liberalism.

For instance, Professor Carver offers "A liberalist program for the complete abolition of poverty" which includes the taxation of land values and inheritance, the control of monopoly prices, the curtailment of immigration, the restriction of marriage, the enactment of minimum wage laws, and other legislative measures. He believes that all of these are not only not inconsistent with, but are really essential to, the maintenance of liberalism. Inheritance and the private appropriation of land values he regards as institutions which interfere with equal competition, and equal competition is the very essence of liberalism, as he interprets it. Monopoly is in the same position. Immigration and unrestricted marriage cause low wages. Their restriction, he thinks, will raise wages without governmental interference in prices, and without destroying the economic liberty of the individual. Minimum wage laws are defended as correcting the handicaps to equal competition which result from the ignorance and weakness of certain laboring classes. Mr. L. T. Hobhouse, an English liberalist, supports an even more sweeping program.

While such measures as these may preserve the spirit of liberalism, they have departed considerably from its form. There is perhaps a sense in which the liberty of the individual may be enlarged by governmental interference with the ownership of land, the inheritance of wealth, the practices of monopolies, and so on; but it is accomplished by a considerable extension of governmental functions and by restricting greatly some of the liberties now enjoyed by certain members of society. This is quite a departure from liberalism as it was originally understood. Mr. Hobhouse

admits that his proposals "embody many of the ideas that go to make up the framework of socialist teaching." He interprets liberalism as constituting a middle ground which "seeks to do justice to the social and individual factors in industry alike, as opposed to an abstract socialism which emphasizes the one side and an abstract individualism which leans its whole weight on the other. By keeping to the conception of harmony as our clue, we constantly define the rights of the individual in terms of the common good, and think of the common good in terms of the welfare of all the individuals who constitute a society."[3] He even intimates that perhaps it would be more appropriate to call this philosophy "Liberal Socialism."[4]

Liberalism and the Modern State.—At the beginning, liberalism was a reaction against the excesses of an autocratic and unintelligent government. Its objections to state activity apply with less force to the modern world. As governments become more democratic, we have less to fear from the arbitrary exercize of power by the public authorities. In the long run, they must administer their offices in ways not too displeasing to the voters who elect them. We have made less progress toward improving the intelligence of government, perhaps, but it is not unreasonable to assume that as future years bring into office administrators and legislators with more vision and understanding of economic matters, we may grant them greater powers of economic control without misgiving. Tinkering with business by people who do not understand it is dangerous. If this is the alternative, economic affairs had better be left to themselves. But as we grow more familiar with economic laws, we can begin to mold existing institutions as we want them with every hope of success.

The Passing of Pure Economic Liberalism.—The tendency to modify the pure doctrine of liberalism is an evidence of the weakness of the liberal program. Once embarked upon such measures of intervention as those outlined in the preceding paragraphs, the line between liberalism and other programs of social policy is hard to draw. Pure individualism is too defective to command our approval. Modified liberalism is a compromise which can hardly be called liberalism at all. Such a compromise may be desirable. Before we decide upon it, however, we should consider the program of socialism, which is the principal alternative proposal. This we shall do in the following chapter.

Summary

Liberalism is a comprehensive program of social policy which may be contrasted with anarchism and socialism. It stresses the liberty of the in-

[3] L. T. Hobhouse, *Liberalism*, p. 211.

[4] *Ibid.*, p. 172.

dividual. Originally based on the natural rights philosophy of such men as Locke and Rousseau, it later came to be defended on Bentham's principle of the greatest good to the greatest number. Economic liberalism was a reaction from the Mercantilist system. It is that system of industrial organization in which free enterprize and competition prevail. Economic liberalism argues that there is a harmony of individual and social interests which results from free enterprize because: (1) the self-interest of people leads them to look after their own welfare if left free to do so; (2) economic competition establishes economy thru the price system; it is more satisfactory than political competition, and it naturally selects the most efficient leaders for industry; (3) the competitive system of distribution is good because it rewards each in accordance with his productive importance and promotes economy in the use of the means of production. Private property is also defended on the ground that it secures the best utilization of wealth. The maintenance of liberty requires a *laissez-faire* policy of government, whose activities should be restricted to a minimum. While the present system of capitalism involves free enterprize, competition, and private property, we have much more state regulation and monopoly than would prevail under liberalism. Anarchism resembles liberalism in its emphasis on individual liberty, but is much more radical in seeking to abolish all government and private property.

The principles of liberalism have many merits, but they are defective in several respects. The ignorance of consumers and producers makes it undesirable to rely entirely on self-interest without intervention to guide individuals in economic affairs. Free competition works badly because of unethical competitive practices, the unequal opportunities which different people enjoy, and the growth of monopoly. It does not always give success to those who contribute most to social welfare. The satisfactory operation of the price system itself is interfered with by the ignorance of consumers, the inequalities of income, and the immobility of labor and capital. The distribution of incomes in a competitive society involves too much inequality and too many unearned returns. Finally, private property should sometimes be replaced by public ownership in the interests of social welfare. These difficulties have led modern liberals to abandon the emphasis on pure individualism and to advocate increasing legislative measures, which represent a compromise between liberalism and socialism.

SUGGESTIONS FOR FURTHER READING

L. T. Hobhouse's *Liberalism* (Holt's Home University Library series) is a very well written survey of the liberal movement from its beginnings to the present time. See also the article on *Liberalism* in the *Encyclopedia of the Social Sciences,* which contains a good bibliography of the subject. A vigorous presentation of a modern liberalist's views is that of T. N. Carver in his *Essays in Social*

Justice (1915). A briefer statement of his position is contained in his *Principles of National Economy* (1921), Chaps. LV and LVI. F. M. Taylor, in his *Principles of Economics* (1921), Chaps. XLII-XLVIII, presents a careful critique of the existing order, which is essentially a defense of the system of competition and free enterprize. A stimulating and somewhat novel presentation of liberal philosophy is contained in Henry C. Simon's challenging pamphlet, entitled *A Positive Program for Laissez Faire* (University of Chicago Press, Public Policy Pamphlets).

The most illuminating criticism of liberalism which has come to the attention of the present writers is contained in H. Clay's *Economics for the General Reader* (American edition, 1918), Chaps. XXI and XXII. Material from it has been drawn upon for Part B of the present chapter.

For a short bibliography of the older literature on liberalism see the bibliography in Hobhouse's work, above cited.

CHAPTER XXVIII

SOCIALISM

A. The Predicted Downfall of Capitalism

Socialists Reject the Present System.—We have seen how liberalism upholds the principles of free enterprize, competition, and private property, which, tho considerably modified, are still the fundamental institutions of capitalism. Socialism, on the other hand, rejects these principles, for the most part, and would set up in their place a new social structure based on consciously planned and directed collective organization. Socialists believe that our present industrial system is so full of evils that it cannot be corrected without a fundamental and far-reaching reconstruction of society. No measures of piecemeal reform can be satisfactory, they think, because the system is wrong in its basic foundations. Consequently, they reject as inadequate a policy which seeks merely the correction of each specific problem as it arises, believing that only by a thoro revision of the whole plan of our economic and political life can a satisfactory way out of our difficulties be found.

The socialist movement has gained such strength, and is supported by so many able men, that its program deserves to be thoughtfully considered. It is a subject about which there has been so much misrepresentation and prejudice that we must be extremely careful to approach it without bias or preconceived ideas. Only by a fair-minded analysis of the proposal can we hope to arrive at an intelligent judgment concerning it. Let us endeavor to investigate the subject in an impartial spirit. We should first examine why the socialists seek to overthrow the existing order.

The Socialist Indictment of Capitalism.—In the first place, socialists maintain that the system of capitalism is exceedingly inefficient in its productive organization. Competition and free enterprize lead to divided effort and much wasteful duplication of plant. Hundreds of factories, wholesale and retail stores, and other establishments are maintained where a few large ones could do the work far more satisfactorily. An enormous amount of energy and wealth is expended in flamboyant advertizing, high pressure salesmen, and other selling effort, whose only effect, according to the socialists, is to divert consumers from one competitor to another without social benefit. Since the primary motive of producers is to make profitable sales rather than to render service, many useless or even noxious wares,

such as patent medicines, chewing gum, and intoxicating liquors, are foisted upon an easily influenced public. Thus a large portion of industry is devoted to the production of luxurious articles and commodities of doubtful benefit which represent economic waste.

The failure of capitalistic production to perform adequately and smoothly its function of supplying the needs of the people is proved, socialists believe, by the periodic breakdown of our industrial machinery manifested in recurrent business depressions. We have already seen how at such times business comes to a standstill, goods are wasted, machinery lies idle, workers are unemployed, and there is much suffering and disaster. To socialists this is evidence that there is something wrong with the fundamental bases of the industrial system. It is disorganized, chaotic, and inefficient,—a situation which calls for radical remedies.

Equally vehement is the socialist attack against the present distribution of wealth and income. The extravagant luxury with which the very rich regale themselves, in contrast with the misery and degradation of the slums of our big cities, fills the socialists with indignation and dismay. It is not necessary for us to go into this in detail. We have learned something of the facts as to inequality, and we know that the socialists are right in asserting that it exists to an undesirable degree. They believe that this is another evidence of the failure of the industrial system which calls for a radical solution.

Not only does the present industrial system bring waste and inefficiency and economic want, say the socialists, but it destroys the moral and esthetic fiber of the people who are subjected to it. In a society where profits are the dominant motive of those who control industry, and where competition is the rule of conduct, high ethical standards are not likely to prevail. Instead of service to the people and the development of a spirit of coöperation and mutual good will, there is revealed selfishness and a fierce struggle between rival classes and individuals that makes for disunity and low morality. Nor is this all. The keeping of large masses of the population in poverty degrades them, makes of them beasts, leading to crime, vice, intemperance, and other evils. Moreover, such a system does not promote the beautiful in life. Contrast a modern city with the natural beauty of the country about it. Ugly, dirty streets, long rows of unattractive houses, smoky factories, greedy, distorted human beings—these, the socialists feel, are the product of the competitive system of industry.

Most fundamental of all the counts in the socialist indictment of capitalism is the contention that there is no unity of action, no central plan, in our present society. The competitive system can be likened to the wild forest, in which useless weeds battle fiercely with desirable plants, and where a bitter struggle goes on, leading to the entangled chaos of nature's wilderness. Socialists see the possibility of substituting for this chaos an

orderly, coördinated, carefully planned and directed society, just as man has replaced the primeval forest with his carefully cultivated gardens, in which only those plants thrive whose growth he wishes to encourage, and from which, by his superior method, he obtains fruit far better than nature can produce in her haphazard way. They believe that if free, competitive enterprize is replaced by a coöperative, collectively organized society, a similar improvement can be effected in the economic world.

Marx's "Scientific" Analysis.—Modern socialists base their doctrines largely on the teachings of Karl Marx, a German who lived in the early part of the nineteenth century. In collaboration with his friend, Friedrich Engels, he published two famous works, "The Communist Manifesto" (a pamphlet), and an elaborate treatise, "Capital," which together constitute the foundations of socialist teachings today. Marx was a student of the economic literature and phenomena of his time. He believed in the economic (or "materialistic") interpretation of history,—that is, that economic events are dominant in controlling the political and social life of man. Analyzing the trend of events as he found them about him, he endeavored to prove that an evolution was going on which must lead to the downfall of capitalism. Because this analysis claims to be based on scientific reasoning, Marx's system is frequently called "scientific socialism" by its adherents. Marx's economic interpretation may briefly be summed up in five principles: the "law of concentration," surplus value, the two-class struggle, the overproduction theory of crises, and social revolution.

Marx saw the transition which had taken place from the domestic industry which preceded the Industrial Revolution to the large factories that followed it. He saw also the advantages of large-scale production and the tendency toward big business combinations which resulted from it. He concluded that the concentration of industry would go on until the small independent business men would be eliminated and forced to become employees of a few powerful capitalists. Thus the middle class, whom the socialists call *the bourgeoisie,* would disappear, and society would be separated into two groups—*the capitalists* and *the proletariat,* or wage-earning class. He further believed that, as this process went on, the position of the wage-earners would become progressively worse, with an increasing amount of misery.

The doctrine of surplus value was invoked to show how the capitalists exploit the proletariat in such a way as to produce increasing misery. All wealth, said Marx, is produced by labor; that is, all wealth is produced by the workers of hand and brain. Nature is merely a passive agent, and capital is itself the product of labor, so that neither landowners nor capitalists, as such, contribute to production. The value of labor's product, however, greatly exceeds its wage, for the laborer is paid only enough to maintain

him at a bare level of subsistence. Consequently there is a surplus value created which the capitalist is able to take for himself. It is unearned by the capitalist because he did not produce it. Profits are, therefore, the result of exploitation.[1] Marx's "law of concentration," coupled with his doctrine of surplus value, led to a picture of society as ultimately divided into two classes whose interests are diametrically opposed. On the one hand is a small group of exploiters, the capitalists; on the other hand are the exploited workers, the proletariat. The result must be a class war between the two groups. There can be no compromise, for the situation becomes progressively worse as society advances. The lot of the workers must be one of increasing misery.

This situation, said Marx, contains within itself the seeds of its own destruction. It leads to overproduction and business depressions. According to the Marxian theory, capitalists, in expropriating the surplus value of labor, become possessed of more wealth than they themselves can consume. They therefore invest this wealth in the accumulation of more capital, which increases production; but, since the laborers who constitute the great mass of consumers are not given all the purchasing power which they produce, they are unable to buy back from the capitalists the extra wealth created by this additional production. There results a general overproduction of goods with which the markets become glutted. Industrial collapse follows.

Marx believed that these crises were bound to become worse with the growing concentration of industry until at last there would be so serious a catastrophe that the capitalist system would destroy itself. When this catastrophe comes, he believed that a revolution would take place, in which the proletariat, having become conscious of its own strength, would seize the reins of industry. They would establish a new system of society in which the capitalists would be dispossessed of their property, and the workers—the true producers—would own and operate industry for themselves.

A Criticism of the Socialist Attack on Capitalism.—Any fair-minded person must admit that there is much truth in the socialists' indictment of capitalism. In fact, many of the things which they criticize are defects which we have ourselves recognized and sought a remedy for in the earlier chapters of this volume. The socialists are performing a useful serv-

[1] Marx deduced his idea of surplus value by a subtle bit of economic theorizing. He believed in a labor theory of value,—that is, that the values of commodities are determined by the quantities of socially necessary labor embodied in their production. The value of labor itself, however, was determined by the quantity of labor necessary to support labor,—that is, by subsistence. Since the values of commodities so determined exceeded the subsistence wage, surplus value (the profits of the capitalists) resulted. This reasoning has been the subject of much controversy. It is universally rejected by economists of standing, for the modern theory of value makes it clear that the value of a commodity is not determined by the quantity of labor required to produce it. Many socialists have seen the error of the Marxian reasoning on this point, but others defend it and seek to reconcile it with sound economic doctrine.

ice in calling our attention so forcefully and constantly to these evils. It does not necessarily follow, however, that because these evils exist the whole capitalist system is unsound. Socialists exaggerate some of the defects, and they do not always ascribe them to their true causes. For example, not all the wastes of production are due to competition and free enterprize, and many of them would doubtless continue in a social system founded on different principles.

The Marxian analysis, which is the basis for the prediction that capitalism is doomed, is particularly faulty. The "law of concentration" has not been fully verified. There is undoubtedly a tendency to increasing centralization of management in industry, as we have seen, but the modern corporation, with its multitude of shares of stock, has brought about greater diffusion of ownership than ever before. The middle class is certainly not disappearing, and the condition of the working classes was being steadily improved, at least until the Great Depression. The doctrine of surplus value is unsound, at least in part. While we know from our previous study that there are unearned incomes in society, it is not true that all interest and profits are the result of exploitation. In an earlier chapter, also, we demonstrated that the overproduction theory of crises is fallacious. In the face of all these errors, very little is left of the Marxian "scientific" analysis.

While admitting the truth of many of their criticisms of capitalism, therefore, we find that the causes have not been satisfactorily analyzed by the socialists. Hence one can concede much of the socialist indictment without necessarily being committed to the socialist remedy. Nevertheless, in showing the fallacy of the Marxian analysis we have not disposed of the socialist proposal for the reconstruction of society, for even tho Marx may have been wrong in much of his argument, the constructive program of modern socialists contains much that is interesting and meritorious. Let us consider its possibilities as a scheme of economic reconstruction.

B. The Socialist Program

A Definition of Socialism.—Socialism is a term so broadly used that it includes many different schemes of social organization. For this reason one must be careful about making generalizations concerning socialism, for what one may say of one kind will not necessarily apply to another. All socialistic projects, however, have certain features in common which justify their being classed together. What, then, is socialism in its general meaning? It may be defined as *the collective ownership and democratic management of the socially necessary means of production.* Let us examine this definition to see what it means.

Collective Ownership.—Collective ownership is the cardinal feature

of socialism which distinguishes it from other systems, such as liberalism or anarchism. In fact, the term "collectivism" is often used as a synonym for socialism. By collective ownership is meant ownership by the people as a whole, instead of by private individuals. Under socialism, industry, instead of being in the hands of individual capitalists in a system of free enterprize, would be controlled by the people thru some common organization. Just what the organization would be is a matter of detail on which different socialistic groups are not entirely agreed. The means of production might be owned by the state under a system of representative government. Or, industry might be put in the hands of the workers thru some system of trade union associations similar to the soviets in Russia. Again, workers' guilds might be organized in each of the several industries. Yet another plan is to set up producers' coöperative societies, each factory being owned and operated by the wage-earners employed in it. Or, there might be a combination of two or more of these plans. Whatever the arrangement, its distinctive feature would be the absence of capitalistic proprietors, the ownership being vested, by one means or another, in the masses of the people.

This collective ownership, however, does not apply to all property which is now privately owned. It applies only to the "socially necessary" means of production. These include all large landholdings, the forests and mineral deposits, the railroads and other public utilities, and the more important basic manufactures, such as those of iron and steel, textiles, meat-packing and other food manufacture, and the like. In fact, all the principal industries of the nation would be socially owned and operated. But each individual would still be permitted to own his home and personal effects. He might even engage in small industry for himself. Little shopkeepers, manufacturers of novelties and luxuries, and small farmers might continue private operation. It is only in those industries upon which the public is peculiarly dependent, and in which the danger of exploitation of the working class by huge capitalists is most present, that the socialist insists upon the abolition of private enterprize.

Socialists are not entirely agreed as to how collective ownership of the socially necessary means of production is to be brought about. Some favor absolute confiscation, others purchase. Probably a majority favor confiscation. Purchase is not quite consistent with the socialist opposition to unearned incomes, for it would leave present owners in possession of the purchase price. This they could live upon comfortably without working. This evil, however, need only persist for one generation, for these fortunes could pass into the hands of the state upon the death of the present holders. Some socialists believe that collective ownership can be established by means of the ballot, others that it must be accomplished by violent revolution.

Democratic Management of Industry.—Collective ownership of the means of production does not constitute the whole of socialism. On the contrary, socialists very insistently emphasize the difference between their program and that of ordinary government ownership. Socialists desire to see the control of industry actually in the hands of the working class. This they believe would never be brought about by a mere transfer of the ownership of capital from private individuals to the state, as at present constituted; for the political structure of today, they assert, is primarily in the control of the capitalist class. Mere government ownership would only change the machinery by which exploitation was made effective, without abolishing it. Therefore they insist that the management of industry shall be democratically carried on. To the concept of political democracy which has been so popular since the French Revolution, the socialists add the idea of industrial democracy, which it is the purpose of the social revolution to bring about. Democratic control of industry would be made possible, they believe, by placing the political power much more truly in the hands of the people than at present. To this end they favor such measures as the initiative, the referendum, the recall, and other democratic devices. There is a considerable tendency to favor a more decentralized form of government, which would localize the industrial management of each region in the hands of the people of that locality. Some socialists favor the substitution of industrial for geographical representation in governmental legislative bodies. Along with this the control of each industry would be placed in the hands of an organization of the workers in it, somewhat similar to the trade unions of the present time. This is the soviet idea. Some of these projects will presently be taken up in greater detail.

Changes in the Distribution of Income.—It is a popular notion among the misinformed that socialists propose a mere equal division of the present wealth of society, such, for instance, as the confiscation of the large incomes of the rich and their gratuitous division among the poor, thereby bringing all incomes to a level. No intelligent socialist would make so crude a proposal. Socialists do believe, however, that the present system of distribution is unjust and unnecessary. They hope by their system to effect a more equitable scheme of apportioning incomes.

Being unalterably opposed to all property incomes, they propose to abolish these, except in the case of small proprietors, where the earnings from property would be insignificant. By placing the ownership of capital in the hands of society, they would wipe out the private receipt of large incomes in the form of rent, interest, and profits. Most of the people would become wage-earners employed by the state, or by whatever domestic industrial organization was set up.

The Determination of Wages under Socialism.—What would de-

termine the amount of wages paid to these workers? Here again is a point upon which there is disagreement among socialists. In Chapter XX we considered four possible principles upon which income might be distributed. These were: (1) equal distribution, (2) distribution according to need, (3) distribution according to sacrifice, and (4) distribution according to productivity. Each of these has been advocated by one group or another from time to time as the most just basis for the fixing of wages under socialism.

Mr. George Bernard Shaw has argued at some length that equality of incomes is the very essence of socialism. Payment according to need, or substantial equality of wages, is regarded by many socialists, and especially by the communists, as their ultimate ideal, but most of them do not consider it as immediately practicable. Payment according to sacrifice has also found considerable support. As interpreted by socialists this means that wages would be paid according to the number of hours of work done, with perhaps some allowance for the differences in the agreeableness or difficulty of the various occupations. Probably a majority of socialists, however, favor a system of wages determined by the efficiency or productivity of the worker. This is a frank recognition that an individual who is more able or willing to work than his fellows should be paid higher accordingly. This would permit some degree of inequality to exist. A majority of socialists do not object to this, provided the inequality is not so great as to leave some in the possession of vast fortunes while others are not provided with the decencies of life, and provided also that such inequality as exists is due to a real difference in the efficiency of individuals. By abolishing incomes from property and permitting only wages to be earned, they believe that such inequality of wages as would be based upon differences in ability would be fair, and at the same time would stimulate each to his maximum endeavor. While perhaps ethically not as ideal as payment in accordance with need, this basis of wages is more expedient.

Socialism and the Family.—It is popularly believed, by persons inadequately informed concerning socialism, that socialists propose to destroy the present institution of the family. In fact, it has been quite generally intimated that socialists are advocates of free love, the "nationalization" of women, or other measures tending to promote promiscuity between the sexes. This is due partly to deliberate misrepresentation by the opponents of socialism and partly to misunderstanding. It is true that some of the early Utopian socialists included bizarre proposals about marriage in their schemes, but Utopian socialism is no longer taken seriously, even by socialists. It is also true that some Marxian socialist leaders have speculated about the future status of marriage in the socialistic commonwealth. Socialists as a body, however, have no proposals of this sort to offer and do not contemplate interference with the institution of monogamy. It must

be remembered that socialism is primarily an economic and political, not a sex program, and any changes which might take place in the family would be only such as would naturally follow from the changed economic status of the working classes. Socialists believe that happy and normal family life is largely interfered with today by our economic institutions. Economic pressure, they assert, brings about the subjection of women, while poverty interferes with the maintenance of the home. Therefore, such evils as divorce, prostitution, and vice can be attributed to economic maladjustments. With the correction of these maladjustments socialists think that a more ideal family life would become possible. Probably there would be greater freedom of divorce, for unions then, they claim, would be maintained by love and not by compulsion. But such matters as these are incidental to, and not an integral part of, the program of socialism; and whatever individual socialists may think about the ideal form of family relationship, there is nothing inherent in the socialist organization of society which is incompatible with monogamy.

Socialism and Religion.—There is a similar popular misconception about the relation between socialism and religion. It has frequently been alleged that socialists are atheists and that socialism would destroy religious institutions. This is partly the result of misinterpretation of the socialist attitude towards a state church and partly the result of the radical religious views held by some of the more extreme socialists. Where the church has been definitely affiliated with the government and was part of the machinery for maintaining the existing régime, socialists have quite actively opposed it because it was a definite obstacle to the realization of their plans. In Russia, for example, the Orthodox Church was very powerful and wealthy, owning immense estates, and a corrupt priesthood worked hand in hand with a corrupt officialdom to keep the people in subjection. The communists divorced the state from the church and confiscated much of its property. It is also true that the communists have definitely attempted, thru teachings in the public schools, to discredit religious beliefs in the minds of the Russian people; and there have been numerous socialist leaders who, disgusted with the church, have become distinctly anti-religious.

There is nothing in socialism, however, which is necessarily antagonistic to religion. Indeed, many devout Christians are to be found among socialists, and at least one form of socialism is definitely based on the teachings of Christianity. We shall presently have occasion to describe briefly the views of these Christian Socialists, as they are called. So, altho it is true that socialists have some grievances against the organized church, it is not fair to say that socialism is anti-religious; and there is no reason why religion could not flourish in a socialistic society.

Socialism and Anarchism.—Socialism is frequently confused with anarchism. This is perhaps natural in view of the fact that both are radi-

cal movements which aim to overthrow the existing order. Both agree in their opposition to capitalism, but they differ greatly as to the form of organization which should replace it. It will be remembered that anarchism is an extreme form of individualism, which puts personal liberty first and social organization second; but socialism upholds the principle of collectivism, which would subordinate the individual to society, binding all together in a strong social organization. Like the anarchists, socialists oppose the state when it is conceived (following Marx's idea of it) as an organ of the ruling classes for the oppression of the masses; but unlike them, they recognize its importance as a democratically controlled machinery for the administration of industry and other common interests, and they would greatly extend it in this direction. Socialists are unable, also, to accept the anarchist belief that all coercion by the state can eventually be done away with.

There is one group of anarchists, however, known as the anarchist communists, who resemble the extreme socialistic communist group in the ultimate goal which they set up for society. They differ as to the means of attaining it. One school of socialism, also, known as syndicalism, bears a slight resemblance to anarchism in that it would abolish the state as at present constituted, leaving industry in the hands of industrial unions which might be somewhat like the voluntary associations of the anarchists, altho probably they would be more definitely organized.

C. Various Forms of Socialism

Socialistic Programs Are Diverse.—Most socialists would assent to the general scheme of collective ownership and democratic management outlined in the preceding section. They differ, however, (1) regarding the detailed scheme of organization that would make collective ownership and democratic management a possibility, and (2) regarding the tactics to be followed in bringing about the overthrow of capitalism. Socialists therefore can be divided into a number of groups or schools, each of which has its own plan.

Communism.—Communism, as the word is now used, may be regarded as an extreme form of socialism. The communists' views are, in fact, based on the teachings of Marx. Communism, however, goes a step further than socialism, as the word is generally used. Socialism aims only at the collective control of production. It would place industry in the hands of the people; but the private ownership of consumption goods would not be disturbed, and each individual would be free to direct his consumption as he chose. Presumably the system of prices would be maintained and individuals would receive their incomes in the form of money, which they could spend in the purchase of such commodities as pleased their

fancy. Communism would extend collectivism to the control of consumption as well as production. The communist formula is "From each according to his ability; to each according to his need." Communism would mean the complete abandonment of wages, prices, money, and free exchange. Society would control consumption as well as production, determining what was to be produced and in what quantities, and distributing the product, thru a system of rationing, where it was believed it would do the most good.

Utopian Communism.—The earliest communists, who antedated Karl Marx himself, hoped for the reorganization of society into small, isolated communities, where Utopias were to be set up in which all would produce in a coöperative way and share equally in the fruits of their toil. A few Utopian colonies, such as Brook Farm, Amana Community, and Oneida Community, were actually established and the ideal life advocated by their founders was attempted. But, needless to say, most of these experiments failed. Modern socialists realize that world problems are not to be solved by men withdrawing into separate groups and trying to set up little kingdoms of heaven of their own, but that if society is to be reformed at all it must be done *en masse.*

Modern Communism, which is exemplified by Soviet Russia, is very different from Utopian Communism, for it proposes to apply communistic principles on a national scale. We shall discuss it in some detail in the following chapter.

Christian Socialism.—Another group of writers has become convinced that the teachings of Christianity, if actually lived by men, would lead inevitably to a collectivist system of society similar to that advocated by socialists. They are accordingly carrying on a socialistic propaganda based upon religious inspiration. Taking as their program such texts as "Love ye one another" and the "golden rule," they seek to bring about a better order of society. Some seek simply to apply Christianity to current problems, such as the dispute between capital and labor; others uphold a more coherent program of society reorganized along socialistic lines. The essence of *Christian socialism* consists in the belief that the reform of society can come only by the reform of individual characters. Immediate efforts should therefore be directed toward the inspiration of the individual and the stamping out of the selfishness and greed of men. The movement has many strong supporters among both Catholics and Protestants, some of the better-known writers of this school being Charles Kingsley, Walter Rauschenbusch, and the Frenchman LePlay.

Fabian Socialism.—In England a group of intellectual writers, including H. G. Wells, Sidney and Beatrice Webb, G. Bernard Shaw, Graham Wallas, and other well-known men, organized in 1884 the Fabian Society of London, which, with a membership of about 1,500, exercizes a degree

of influence on English thought far out of proportion to its numbers. The Fabians believe in socialism as the ultimate goal for the reorganization of society. They do not think, however, that its program can immediately be realized. They are evolutionists rather than revolutionists, and opportunists rather than absolutists. No system of socialism, according to their point of view, can be successful until men have first been educated to the ideals of socialism. Socialism can come only by gradual steps. Consequently they favor education and have published a large mass of literature aimed at popularizing and disseminating the ideas and ideals of socialism. They are also actively working for the gradual increase of government ownership, which they regard as a convenient stepping-stone to the ultimate realization of their goal. The Fabians have exerted a tremendous influence on English political, intellectual, and social life, and were largely instrumental in bringing into existence the Labor Party of Great Britain, which wields a powerful influence there.

State Socialism.—We now come to that group which, prior to the Russian Revolution, constituted the majority socialists of most of Europe and the United States. Their proposals are most conveniently described by the term *state socialism,* altho they prefer to call themselves by some such title as "moderate Marxian socialists" or simply "democratic socialists."[2] This group differs from other socialists (1) in the type of social organization which they advocate, and (2) in the methods by which they seek to bring it about. In general, they favor the taking over of the socially necessary industries by a state organization very much along the lines of present governments, except that it would be much more democratic, and probably much less centralized. Some industries would be in the hands of municipalities, others in those of state or national bodies. Presumably all the industries would be coördinated and administered on some national plan, but a considerable degree of local self-government might be permitted to the workers in the various districts and in individual plants. Many socialists fear the danger of too centralized a bureaucracy, and therefore advocate a large measure of local autonomy. The organization would be flexible, and there would be room for coöperative enterprizes and small individual businesses. The details of the socialist state have not been as carefully worked out, nor as generally agreed upon, by this group as by some of the others. They believe that too rigid a program cannot be formed in advance, for some experimentation and feeling of the way will be necessary after the socialists get in power.

It is primarily in matters of tactics that the state socialists differ from

[2] The term "state socialism," as here used, must be distinguished from the mere extension of government into such activities as social insurance, factory regulation, minimum wage laws, and the nationalization of a few large industries—a sense in which it has sometimes been employed.

other socialists. They are strongly organized into political parties and seek to accomplish their aim mainly by means of the ballot. They expect gradually to increase their representation in legislative bodies (for instance, in the Congress of the United States), until they obtain a sufficient majority to control the government. They can then pass the legislation necessary to put socialism into effect. At the same time they believe in fostering many other kinds of workers' organizations to build up the solidarity of the laboring classes and to pave the way for socialism. They encourage trade unions, and seek to win them to their cause, so that eventually they can utilize their organization for bringing about the revolution. They also support the growth of producers' and consumers' coöperatives, and measures of general workers' education. In such ways as these they hope to establish the new society by peaceable, constitutional means, without violence, unless the minority capitalists attempt to resist socialist legislation when put into effect by the majority. They are opportunistic in their methods, being willing to extend government ownership and other semi-socialistic measures wherever occasion permits, thus bringing them step by step nearer the ultimate goal. This group is represented in the United States by the Socialist Party.

Syndicalism.—A more radical form of socialism is that known as *syndicalism*. While syndicalists are followers of Marx, they look forward to a form of organization somewhat different from that of the state socialists and they are more extreme in their tactics. The chief characteristics of syndicalism can be summed up under four headings—industrial unionism, direct action, two-class war, and the general strike.

Syndicalists oppose trade or craft unions, such as those of carpenters, boilermakers, bricklayers, etc., because such unions divide labor into classes with different interests. They favor industrial unions of all the workers, skilled and unskilled, in each industry. Thus they would set up railway unions, steel workers' unions, textile workers' unions, and so on. Such an industrial union is known in France as a *syndicat,* from which term the movement takes its name. The syndicalist is opposed to the political state, for he thinks that it is an organ to enable the capitalist to exploit labor. He thinks labor can never get its rights thru the use of the ballot. Therefore, he favors direct action by the workingmen against their employers. The means of direct action are primarily sabotage (destruction of materials, crippling of machinery, loafing on the job, etc.) and the general strike, which are calculated to make the system of capitalism work so badly that it will break down more quickly and make possible the advent of socialism. The syndicalist believes literally the Marxian doctrine of the two-class war, and he looks forward to a time when a general strike of all labor will be called, in which the workers will walk out *en masse,* forcing the capitalists to turn over their industries to collective control. This gen-

eral strike, they believe, is the great catastrophe which Marx predicted would usher in the social revolution. After the strike, the syndicalists hope to reorganize society along industrial lines. The syndicates, or industrial unions, will be the units of government, controlling the productive processes in their respective fields. The only central government will be a federation of industrial unions, the political state, as it is at present constituted, being done away with.

The syndicalist movement is represented in the United States by the Industrial Workers of the World. While a radical group, their numbers are few, and syndicalism is not a very important factor in the socialist movement on this side of the Atlantic. In France and Italy the movement was very strong prior to the World War, but at the present time it is a significant force only in Spain. While syndicalism has declined in importance since the war its influence is seen in guild socialism and modern communism, both of which have borrowed from it some of their ideas.

Guild Socialism.—*Guild socialism* is a compromize between syndicalism and state socialism. Its chief characteristic is its proposal to place the control of each industry into the hands of functional guilds, democratically governed by all the workers (including managers and technicians) employed in such industry. These guilds are to be glorified industrial unions, which it is supposed would be actuated by high standards of ethics and professional pride. The guilds would be more or less subordinated to a political organization or commune, corresponding somewhat to the present state. This amounts to a system of dual sovereignty, in which society is organized along both industrial and political lines. Under this plan each member of society would be doubly represented—in two different governmental bodies. On the one hand, he would be represented as a producer by virtue of his membership in his guild. On the other hand, he would be represented as a consumer in a commune or legislature. There would be local industrial guilds and communes, as well as regional and national ones. There would be two national congresses, one representing all the members of the community as citizens, the other representing the industrial guilds, its delegates being selected according to industry. It would be the function of the guild organization to carry on production and the details of management. It would be the function of the political or communal organization to control the prices charged by the industrial units so that the consumer would not be exploited, to direct the productive agents into those channels where they are most needed, to determine the jurisdictions of the various guilds, to provide the courts and machinery of justice, to carry on diplomatic relations, etc.

Guild socialism is primarily an intellectual movement led by a small group of writers in England who have attempted to work out in some detail their idea of how the socialist commonwealth could be organized. It has

exerted a certain influence upon socialist thought, but never developed an effective organization nor acquired any significant mass following. It has steadily declined in importance during recent years.

The Socialist Movement.—Socialism is no longer a mere philosophical project, but it has become a more or less strongly organized and active political movement thruout the world. Unfortunately for its cause, the differences of theory just outlined have resulted in a splitting up of socialist organization into divergent factions which prevent concerted propaganda. As far back as 1864, delegates from socialist groups in various countries met in London to perfect an international organization which is now known as the First Socialist International. The presence of anarchist groups, however, soon caused dissension in this body, and this, with other difficulties, caused its early death. Remnants of the organization are still to be found in some countries, but it is no longer an important factor in the socialist movement.

In 1889 the Second International was formed, which united the Marxian socialists of all parts of the world. Prior to the war, it included most of the powerful socialist parties of Europe, and effective international cooperation among socialists was maintained. The war period, however, brought fresh dissensions, and new schisms in the socialist ranks occurred. The movement was broken up into a number of parts, of which two main bodies exist at the present time. On the one hand, is the Right Wing, representing the state socialists and other moderate Marxians, including the powerful British Labor Party and the Socialist Party in the United States. Its organization, known as the Socialist and Labor International, is the lineal descendant of the old Second International. The various national groups in this organization have a considerable degree of autonomy. The Socialist Party of the United States represents the extreme left in the alignment of parties comprizing the Socialist and Labor International. At the other extreme is the radical Left Wing group, led and dominated by the communists of Russia, with the communist and syndicalist factions of the socialist movement in other parts of the world. Their organization is the Third International, with headquarters at Moscow. The Right Wing has a relatively moderate program. While favoring collective ownership and democratic management of industry, these socialists object to violent revolution, and they especially oppose the undemocratic ideas of dictatorship advocated and practiced by the communists in Russia. The Left Wing defend the revolutionary tactics of the communists and the undemocratic dictatorship which will be described in the following chapter. They occupy a strategic position by virtue of their control of Russia, where the experiment still being conducted is so dramatic and colossal as to merit our closest attention. There is also a middle group with tendencies toward the Left Wing but not associated with the Third International. Representatives of

this group are to be found in Great Britain, Norway, Poland, Holland, France, Italy and (prior to the advent of Hitlerism) in Germany.

In spite of these factional differences the strength of the socialist movement must not be underestimated. All of Russia is in control of the communists. The British Labor Party has twice headed the government of England and today constitutes the largest single political party in the country, while, at various times since the war, socialists have had a hand in the governments of Germany and other European countries. In the United States the Socialist Party is the dominant faction and at times has shown remarkable voting strength. It polled more than 900,000 votes in the Presidential election of 1920, while in 1932, its vote ran over 700,000.

The rise of fascism in recent years has had a profound effect upon the socialist movement. Fascism stresses national groups rather than class lines, and, wherever it attains power, it seeks to reduce to impotence the organized strength of the working class upon which the collectivist parties must rely. The parties of the Third International thus see fascism as the principal current issue. As a result they have posed the problem as one of fascism versus democracy. Therefore, their energies are being largely diverted to maintaining those elements of democracy which we now possess, and away from a revolutionary struggle for socialism. To a somewhat lesser extent this is true of the European groups affiliated with the Socialist and Labor International. The Socialist Party of the United States, however, contends that the danger of fascism exists so long as capitalism survives and, therefore, that the best defense against fascism is the complete establishment of socialism. In this sense it remains a truly revolutionary party. There has thus been created a situation in which the Communist Party, whose ultimate objectives are of a more extreme nature, has, in so far as immediate policy is concerned, become the more moderate group.

D. A Critical Estimate of Socialism

What the Socialists Hope to Accomplish.—The socialists believe that their program would accomplish a tremendous improvement in our economic life. In the first place, they assert, productive efficiency would be greatly increased. With the wastes of competition eliminated, industry being concentrated in large-scale producing establishments under centralized direction, a great deal of labor and capital would be released for new production. With the better coördination of industry that would result from collective management, greater stability would be attained. Business depressions, idle plant and unemployment would be done away with. They believe, further, that the elimination of large property incomes and the generally higher level of wages made possible by increased production would establish justice and satisfaction in the distribution of the national income. The masses of the people would be able to live at a reasonable level of comfort, and poverty would be done away with.

With economic want thus eliminated socialists believe that powerful forces for social progress would be released which the socialized state could direct into channels of constructive achievement. Crime, vice, corruption, and the other evils that grow out of poverty and the pressure of economic want, would largely pass away. The moral and esthetic tone of society would be raised, for no longer would mere money-getting be the goal of economic effort. Production would be for service, not for gain. The state could use the social surplus for the promotion of education, scientific research, works of art, and the general betterment of society.

It is an idyllic picture. Can it be realized? Can we look forward with confidence to the attainment of such a millennium? Or is it merely an idle dream—an unattainable mirage? To these questions we cannot give a positive answer, but we can consider some of the pros and cons which must be weighed in forming a judgment of the possibilities of socialism.

The Central Planning of Industry.—Perhaps the greatest constructive idea in the program of socialism is that of a well-coördinated, consciously unified industrial system. There is no doubt that the disconnected individual efforts of thousands of competing enterprizers lead to erratic, halting, spasmodic production. We have seen some of these difficulties in earlier chapters of this work. The idea of introducing plan, order, and coördination into this chaotic competitive structure is certainly an attractive one. The superior advantages of unified industry are manifest. That the modern business world recognizes these advantages is evidenced in the growth of integration which we have described. Is the logical outcome of these developments the eventual consolidation of all industry in the hands of the state, or in some form of collective organization? Or, can it be achieved without the adoption of socialism, either thru the development of trade associations with increasing power to control the activities of their individual members or thru the development of great trusts under state control? Another possible way of achieving it would be by the setting up of a supreme council of national economy under the state, with considerable authority to direct the productive activities of the nation in a broad way. This would permit the retention of capitalistic industry with a considerable degree of competition and free enterprize, while achieving to a large degree the coördination desired. But whether it be by this means or by the adoption of socialism itself, such coördination is certainly to be hoped for; and in advocating a plan for achieving it the socialists have contributed a very valuable suggestion. The best way of obtaining it depends on whether or not we can expect collectivism to prove efficient in production. This brings us to the most important objections which have been urged against socialism.

The Incentive of High Gains Removed.—The first of these objections has to do with the incentives to productive efficiency. By eliminating the large property incomes and reducing differences in wages, socialism

would establish a far greater measure of equality of incomes than now exists. No one would be very poor, and no one would be immensely rich. This would eliminate the lure of great wealth which is now the ambition of most business men. It is believed by many persons that it is the possibility of very large gains that provides the incentive to effort and efficiency in the modern industrial system. Perhaps the strongest criticism which may be urged against a socialistic program is that it would remove this incentive. This raises the question as to whether or not socialism could provide some other incentive adequate to urge men to do their best. Would not everyone, being sure of at least a fair living, and knowing that, no matter how efficient he was, he could never become a millionaire, feel that great effort was useless and settle-down to easy-going, indifferent, and inefficient work?

Socialists are not unaware of this objection, and seek to answer it. They are more optimistic regarding human nature than those who urge this criticism against their program. They point out that monetary reward is not the only stimulus to great achievement. Inventors, artists, and other creative minds labor for years in making great contributions to the human race, for which they may never be adequately rewarded. There is a constructive instinct in man's make-up, they believe, that drives him to action and achievement without the promise of pay. They believe also that under socialism a better spirit of coöperation and service will prevail; that with competition removed, new standards of morality and ethics will take their place. They hope also that the prestige of leadership which will come to those who rise to positions of public office and industrial management under socialism will in itself be sufficient stimulus to awake the ambition of all and urge them to their best efforts. Public office has this effect today. Many a lawyer or successful business man has given up a lucrative position to accept the office of mayor or judge, for which he would receive a much lower rate of pay than that to which he had been accustomed, but which would carry a dignity and esteem which he prizes more than any material remuneration. Also the newer developments in personnel work, and in education, indicate that pecuniary motives may not be the only ones which can be invoked to enlist the efforts of the workers.

To the question raised by these arguments no categorical answer can be given. We do not yet know enough about human nature to state with certainty whether or not men can be stimulated to efficient endeavor by other means than the incentive of pecuniary gain. Only a trial of socialism would enable us to reach a satisfactory conclusion on this point. But the possibility of a breakdown of industry from this cause looms so great in the minds of many thinkers as to cast serious doubt upon the advisability of socialism.

The Selective Influence of Competition Would Be Eliminated.—The second obstacle to productive efficiency under socialism lies in the fact that without competition the principle of natural selection in industry would be destroyed. We met with this principle in our discussion of liberalism. In the present régime there is a struggle for existence among business men. Success is achieved, it is alleged, by producing cheaply and efficiently that which the public demands. Those business men are successful who by efficient management keep down their costs and produce articles of merit. Thus, the responsible positions in industry are supposed to be kept in the hands of the most able leaders. Socialism, say the critics, would subtitute for this process of natural selection an inefficient régime of political selection. No longer would success depend upon efficient production, low costs, and industrial ability. On the contrary, it would depend upon political power. With industry in the hands of the public, business managers and leaders of all sorts would have to obtain their positions either by popular election or by appointment. Neither method, it is urged, is reliable. Democratic selection of officials has not been successful. Opportunities for favoritism and corruption arise. Under socialism every position in industry would be subject to the dickerings and baneful influences of political life. Collective enterprize, it is said, is notoriously wasteful and inefficient. Where it is not positively corrupt it is deadened by officialdom and red tape. The opponents of socialism claim, therefore, that instead of increasing production and bringing about the ideal conditions expected by the socialists, it would actually result in colossal inefficiency and industrial stagnation.

This is perhaps the crux of the whole issue between socialism and capitalism. The question raised is one to which no positive answer can be given in the present state of our knowledge. There is so much to be said on both sides, with no way of measuring the relative weights to be given to the various factors involved, that it is impossible to arrive at a certain judgment. Many observers of government enterprizes have commented upon the spirit of inertia and conservativism which prevails therein. It does appear that when officials hold their positions by appointment or election rather than by competitive struggle, they feel less strongly the necessity of making good, and their subordinates are less likely to be selected on the basis of their fitness for the position than on the basis of political influence. And yet, we found that there are many instances where government enterprizes have been very successful. Socialists reply to the criticism, moreover, by pointing out that competitive industry is really much less efficient than its defenders believe. Influence and favoritism are by no means absent from private businesses. Many a high position in an industrial organization is filled by the son or some relative of its owner, when some subordinate of higher qualifications should have had the place. Moreover, private business is not free from graft. The amount of bribery and

influence that is brought to bear would probably be surprizing if the facts were known; but private industries are not subject to the same public scrutiny as government industries; hence their inefficiency is not so likely to be revealed.

Socialism, in whatever form it might be adopted, would have to rely upon the effectiveness of democratic government. Does our experience with such government justify us in believing that we can trust the management of all industry to the rule of the people? If an effective means of directing industry democratically can be developed, socialism can probably succeed. If not, the possibility of its successful consummation is very doubtful.

The System of Prices.—Another problem which socialism would have to confront is the question of prices. We have seen that there is a natural economy in the competitive price system of capitalism. This system would necessarily be modified under socialism. Any form of socialism, other than communism, presumably would retain money wages, money prices, free exchange, and the purchase and sale of commodities; but the natural establishment of prices would be somewhat interfered with. This must be so, for land rents and interest, which at present enter into costs, would be largely done away with; and wages, presumably, would be limited by minimum and maximum rates, rather than being left solely to the play of supply and demand. If wages were not so regulated, it is difficult to see how they would be kept from being just as low in some cases, and just as high in others, as they now are. Therefore, socialism would be likely to disturb the market process by which costs are determined, and with it the natural equilibrium of prices. It appears that prices would have to be set upon commodities more or less arbitrarily, without reference to costs; but prices so established would be likely to result in a lack of equilibrium in the demand and supply, not only for the commodities, but for the agents of production as well. All the difficulties of widespread price-fixing set forth in Chapter XII would be encountered. Those commodities that were priced too high would be unsold. Those that were priced too low would be insufficient to satisfy the demand. No doubt the state would take cognizance of such maladjustments by changing the ratio of production of the articles concerned, but there would still be the question of obtaining equilibrium of demand and supply for the agents of production. If the wage of one type of labor was too high, some of it could not be employed without loss; while if it was too low, there would not be enough laborers to supply the demand for them. And how would artificial capital and land be apportioned among their various uses?

There appear to be three courses which a socialist community might follow in meeting this problem. They might base prices upon some system of cost-keeping and allow the natural equilibrium of supply and demand

to work itself out. If they did this, it is entirely possible that the attempt to control inequality of wages would break down, and society would be forced back into something very much like capitalism. On the other hand, they might do away with prices entirely, resorting to the control by authority of both production and consumption. This would be going over into a régime of communism. Or, production and wages might be determined without reference to prices, on some basis deemed socially desirable, prices then being set by experiment on the commodities produced at such figures as would enable them all to be sold. This would not be impossible, for if the incomes of purchasers and the available quantities of the various goods be given, there is some set of prices that will clear the market. The problem would be similar to that which arises under conditions of joint costs. All the payments for wages made by the socialist state could be treated as joint, and prices for the finished articles fixed in proportion to their relative demands. Probably the last of these possibilities comes nearest to conforming with the aims of the majority socialists. How well it would work is problematical. The question may not be incapable of satisfactory solution, but certainly socialists do not appear to have been fully aware of the difficulties.

Revolution *versus* Evolution.—The radical and sudden overturn of any social system, no matter what long-run benefits might result from it, is necessarily disastrous. This is well illustrated by the terrible days of the French Revolution, the communist Revolution in Russia, and our own Civil War, with the difficult reconstruction periods which followed in each case. Evolution, a steady and orderly progress toward desired ends, is always better than revolution. It seems probable, therefore, that the immediate overthrow of capitalism and its replacement by socialism would be very unfortunate. It is not inconceivable, on the other hand, that we might gradually approach a socialistic régime with some possibility of its ultimate successful establishment. At the present time there are many developments which may be interpreted as indications that we are moving in that direction. The remarkable events in Europe following the World War have shown that the adoption of socialism in a number of nations (whether by evolution or revolution) is not necessarily remote. The discontent of the masses on the other side of the Atlantic for years has been great. Moreover, the gradual growth of interest among the intellectual classes in questions of economic and social reform has added materially to the socialist ranks. On the other hand, the growth of fascism undoubtedly represents a setback to the spread of socialism. However, it, too, has relied primarily upon the discontent of the lower and middle classes for its support, and, therefore, can hardly hope for permanent survival until it demonstrates, more effectively than it has yet done, its ability to provide these groups with a higher standard of living.

The tendencies leading either to socialism or fascism have not been so manifest in the United States as elsewhere, probably because labor in this country has been more prosperous than in Europe. The independence-loving spirit of the American people, the greater abundance of general wealth, and the less degree of poverty here, make this country the great bulwark of capitalism. Nevertheless even here the growth of a sentiment for social reform has not been without its effect upon government. As a result of it many measures have been put into practice which indicate the growth of collective control of industry. The extension of governmental functions into such fields as sickness, accident, health, and unemployment insurance, the growing tendency towards combination of important industries such as railroads and mines, the enlarged powers given to our rate-regulating bodies, the development of labor legislation, and increased interference in disputes between capital and labor, are all evidences of a growing tendency toward the socialization of industry. The increased consolidation of industry and the recognition of collective bargaining which were embodied in the National Industrial Recovery Act were further evidences of this movement. But it does not necessarily follow that they will culminate in socialism. They may indicate merely an increase of public control within the system of capitalism. We may even return to a greater measure of individualism. On the other hand, it is entirely possible that the world may gradually drift into a system of socialism while scarcely aware that the transition is taking place. Provided that progress in the efficiency and integrity of government keeps pace with this increase of collective authority, no alarm need be felt from this movement. For, if and when we have a government that is thoroly honest and intelligently administered, socialism may prove to be a system of economic organization superior to capitalism; but so long as government is inefficient, unprogressive or corrupt, socialism is likely to prove a failure. At present, caution bids us to go slowly. In our concluding chapter we shall endeavor to present a more moderate program.

Summary

Socialists reject the system of capitalism because of the wastes of competitive industry, the occurrence of business depressions and unemployment, the inequality of incomes, the immorality and ugliness which it engenders, and its lack of a definite plan. Marx, by an economic interpretation of history, predicted that increasing concentration of industry, coupled with expropriation by the capitalists of the surplus value produced by labor, would lead to a two-class struggle and depressions of increasing severity, until the system was overthrown by a revolution. We have found that, while Marx's analysis is in most respects unsound, there is some justice in the socialist criticism of our society.

Socialism proposes the collective ownership of the socially necessary (that

is, the most important, basic) industries, with democratic management thru some form of workers' control. In such a reconstructed society all large property incomes would be done away with, most people becoming wage-earners employed by the state. The wages might be equal, or could be based on need or sacrifice, but would probably be paid, as at present, on the basis of productivity. Socialism is an economic and political, not a sex or religious, program. It does not necessarily involve destruction of the family or of religious beliefs. It differs from anarchism in subjecting the individual to the social welfare, where anarchism exalts individual liberty.

Various schools of socialism differ as to propaganda tactics and the ultimate structure of society. Communism is an extreme form of socialism which extends collective control to consumption as well as production, doing away with the system of prices and exchange. Utopian communists would set up small idealistic colonies here and there. Modern communists will be described in the next chapter. Christian socialists believe conversion of the individual to Christian teachings must precede the establishment of socialism. Fabian socialists seek to bring about socialism by gradual education of the people and piecemeal measures of increasing governmental functions. Democratic state socialists hope, thru the use of the ballot and education and organization of the workers, to bring about socialism peaceably, a democratic government taking over the administration of industry. Syndicalists advocate a society organized into industrial unions established by direct action and the general strike. Guild socialists would set up a dual state, composed of producers' guilds and of political, regulatory government. As a result of these differences, the socialist movement is divided into two principal groups, the radical or communist Left Wing, and the more moderate or state socialist Right Wing. In spite of its factionalism, the movement shows considerable strength and has at times polled a large Presidential vote in the United States.

Socialists believe that collective industry will correct the inefficiency of production and the injustices of distribution, and bring about a more ideal society. Their advocacy of a plan of coördinated industry is their most constructive suggestion. Whether socialism can succeed depends upon three questions which cannot be answered with certainty: Can socialism offer a satisfactory substitute for profits and great wealth as the incentive to industrial activity? Will government be sufficiently progressive, honest, and intelligent to develop as efficient an industry as the natural selective process of competition? Can socialism devize a satisfactory system of prices for the direction of industry? The establishment of socialism by sudden revolution would be dangerous, but there is some indication that we may be moving toward it in a more orderly way.

SUGGESTIONS FOR FURTHER READING

An excellent, up-to-date and comprehensive survey of socialism in all its aspects, with considerable attention to post-war developments, is Harry W. Laid-

ler's *A History of Socialist Thought* (1927). The same writer's *Socialism in Thought and Action* (1920) is a briefer treatment, very suitable for general reading. Other good books, several of which, however, were written before the World War, and are therefore lacking in discussion of the recent socialist movement, are: John Spargo and G. L. Arner, *Elements of Socialism* (1921); T. Kirkup, *History of Socialism* (1913); W. E. Walling, *Socialism As It Is* (1912); J. Spargo, *Socialism* (1906).

Among more recent books on the subject one should mention George Bernard Shaw's *The Intelligent Woman's Guide to Socialism and Capitalism* (1928), which presents a strong argument for equality of incomes, and J. Strachey's *The Coming Struggle for Power* (1932), which deals with the conflict between socialism (with a communistic slant) and capitalism in Great Britain. A. C. Pigou's *Socialism versus Capitalism* (1937) gives a well-balanced evaluation of the principal theoretical aspects of socialism.

Marx's and Engels' *The Communist Manifesto* (1848) presents forcefully and readably the Marxian prediction of the overthrow of capitalism. The details of Marx's system are set forth in his three-volume work, *Capital* (English translation, 1908), but this is too ponderous for general reading.

The above works are all by writers favorable to socialism. A careful criticism, showing the weaknesses of the socialist program, is given by O. D. Skelton, in *Socialism, a Critical Analysis* (1911). A. Schaeffle, a German writer, also makes a penetrating attack in his two works: *The Impossibility of Social Democracy* (English translation, 1892) and *The Quintessence of Socialism* (English translation, 1890). For an exposure of the fallacies in Marx's theories one may consult J. E. Le Rossignol's *What is Socialism?* (1921), or his earlier book, *Orthodox Socialism: a Criticism* (1907). L. von Mises, *Socialism* (1936), offers a critical examination of socialist theory which finds it inferior to capitalism in every respect. *Collectivist Economic Planning* (1935), edited by F. A. von Hayek, contains several critical studies on the economic possibilities of socialism.

CHAPTER XXIX

COMMUNIST AND FASCIST DICTATORSHIPS

A. The Communist Dictatorship of Soviet Russia

The Communist Party Comes into Power.—Oppression often begets revolt. It is not to be wondered at, therefore, that the ruthless autocracy which prevailed in Russia under the régime of the czars should have fomented radicalism and a revolutionary spirit among the downtrodden masses of the Russian people. This was fanned into flame by the disasters which Russia suffered in the World War, disasters which were largely due to corruption in the czar's court and among the army leaders. A popular uprising resulted in March 1917, which succeeded in deposing the czar and establishing a revolutionary government. At first the power fell into the hands of the more moderate revolutionists, but in November 1917 the Bolshevists, who constituted the communist branch of the Russian socialist movement, succeeded by a *coup d'état* in gaining the control. Nicolai Lenin, a remarkable man, was made Premier, and he set about the task of laying the foundations for communism in Soviet Russia.

The Communist Theory of Social Evolution.—To understand how the communists went about their task, it is necessary to know something of their theory of social evolution. They believe that it is necessary for society to go thru four stages of development in the path from capitalism to communism.

The first of these is the stage of *bourgeois capitalism,* which is that state of private property, free enterprize, and competition in which most of the large modern nations now find themselves. The communists unite with all other socialists in denouncing this system, and they are pledged to secure its overthrow, not only in Russia, but thruout the world. They believe that the overthrow must be accomplished by a strong, determined group of workers—the "class conscious" part of the proletariat—who seize the reins of government, as the communists actually did in Russia, when a favorable opportunity presents itself.

There follows the stage known as *dictatorship of the proletariat.* The communists realize that the majority of workers are not socialists, and that they would be incapable of managing government and industry if these were placed in their hands. The way must therefore be prepared for them,

thru a dictatorship by the intelligent minority. The word dictatorship is literally construed. The minority must hold its power at any cost, and rule the country with an iron hand, until they have brought socialism into being and educated the people to its ideals. Not until then can the masses of workers safely be trusted to coöperate and carry on a socialistic régime by democratic means.

When the people are thus made ready for it, the stage of dictatorship will give way to the *socialistic society,* which is regarded as the lower phase of communism. In this stage, all the means of production will be in the hands of the democratically governed state. The masses of the workers will now be in control, and industry will be in their hands. But the political state as such will still exist, and some coercive power on its part will still be necessary, until the last vestiges of class opposition have been eliminated from society. Wages will still be paid on the basis of efficiency or productivity. Hence some differences in wages will prevail. There will be considerable centralization of economic and political control. In short, this stage is simply one of state socialism, as it was described in the preceding chapter.

Finally, the socialistic society will evolve into the *communist society,* which is the higher phase of communism, the ultimate goal of the Communist Party. When this stage is reached, the coercive authority of the state will no longer be needed, for everyone will now voluntarily participate in the coöperative commonwealth. The political state, which they regard as an organization of force set up by one class to dominate another, will "wither away," for society will now be "classless." The communistic principle of "from each according to his ability, to each according to his need" will prevail. This means that there will be no wage system, no price system, no money, and no free exchange. Each will contribute his share to the common stream of income, and share in it according to his needs.

The Russian Government Prior to 1936.—One of the first tasks which confronted the communist leaders was the setting up of governmental machinery that would lend itself to the carrying out of their program. Desiring to create a workers' state, they hit upon the already existing workmen's soviets as the nucleus of their scheme. The *soviet* is simply a local workers' council,[1] not unlike the central labor unions of American cities, consisting of delegates from different factory and shop workers. "Workers" includes mental as well as manual laborers, and professional men as well as wage-earners in the narrower sense. Such a soviet constitutes the local unit of government in each city or village. Prior to the new constitution of 1936 there was, above the city and village soviets, a hierarchy of superior bodies, known as Congresses of Soviets, governing the larger areas, such as districts, provinces, and states. These congresses were made up of delegates elected from,

[1] *Soviet* is the Russian word for council.

and by, the local soviets or subordinate congresses. The whole structure was crowned by the All-Union Congress, which was the supreme parliament of the Russian domain. The nearly two thousand members of this congress were elected by the district and regional congresses.

Soviet Russia is in reality not a single nation, but a federation of states, with the title "Union of Socialist Soviet Republics." The Union consists of eleven "Constituent Republics,"[2] each in itself a federation of lesser republics, which together make up most of what was formerly the Russian empire. Taken together, these states comprize an area of over eight million square miles (more than twice the size of the United States), with a population of 163 millions in 1932. These republics possess autonomy only with regard to purely local matters, and since one, the Russian Socialist Federated Soviet Republic, contains two-thirds of the nation's total population, a high degree of centralization is secured.

In the elections to the various soviets, all *workers* over eighteen years of age, regardless of sex, religion, or race, could vote; but employers of labor, those who live on property incomes, private merchants, priests, and certain others were disfranchized. Suffrage was thus restricted to the working class, broadly construed. Moreover, the system of representation was such that the preponderance of power in the higher legislative bodies was given to the city workers, and the elections were so manipulated as to keep the communists in power.

The All-Union Congress was too large a body to function as an active legislature. It met only once every two years. The real national legislature was therefore the Central Executive Committee, consisting of two parts,—the Union Council,[3] made up of delegates from the All-Union Congress, and the Council of Nationalities,[4] made up of delegates from the Constituent Republics. The Executive Committee worked thru two agencies—the Presidium, which was its legislative arm, and the Council of People's Commissars, which was its administrative arm. The latter body, made up of fourteen Commissars, or ministers, corresponded to the cabinet of other nations, and was the real head of the government.

The Constitution of 1936.—In 1936 a new constitution was adopted, heralded as inaugurating a more democratic system than had hitherto prevailed. The former restrictions on voting rights were removed, the suffrage being granted to all citizens eighteen years of age or over, and the method of direct election to all legislative bodies was substituted for the methods of indirect election which had previously been in effect. Also, the All-Union Congress and the Central Executive Committee were replaced by a directly

[2] They are: Russia, White Russia, Ukrainia, Azerbaijan, Georgia, Armenia, Turkomen, Uzbek, Tajik, Kazak, and Kirghiz.

[3] Somewhat analagous to our House of Representatives. [4] Somewhat analagous to our Senate.

representative bi-cameral legislative body, the Council of the Union and the Council of Nationalities being retained as its two chambers. The two latter bodies each consist of about 600 members, those of the Union Council representing electoral districts (of which there is one to about every 300,000 inhabitants), and those in the Council of Nationalities representing the various states that comprize the union (such as the union republics, the autonomous republics, and the national regions). In addition to being a somewhat smaller body than was the All-Union Congress, the Supreme Council will meet twice a year instead of once every two years. The approval of both houses is required for the enactment of proposed legislation. Should they experience inability to agree, new elections will be held.

Meeting in joint session, the Supreme Council elects a Presidium of thirty-seven members which assumes legislative and administrative functions when the Supreme Council is not in session. The responsibility for the execution of existing legislation remains in the hands of the Council of People's Commissars. The Commissars are the heads of the various Commissariats, or executive departments of the government. They are appointed by, and are responsible to, the Presidium and the Supreme Council. There are two types of Commissariats—the All-Union, which handle matters of concern to the entire nation, such as defense, foreign affairs, communications, etc.; and the Union-Republic, which handle matters in which the problem dealt with may differ in character in the various localities.

The Period of Military Communism.—The first years of the communists' régime were a time of extreme radicalism, which, now that it has been succeeded by one of more moderation, is called the period of military (or war) communism. The outstanding features of this period were: extensive nationalization of industry, the conscription of labor, the partial abolition of free markets, money, and the price system, a program of international hostility, and stern repression at home.

The land of the aristocrats and of the church was confiscated and divided among the peasants. The large industries, including coal, iron, gold and platinum mines, petroleum wells, locomotive and machine works, metal and textile factories, railroads, the larger shipping, and some smaller industries, such as salt, cement, leather, and tobacco, were taken over by the state without compensation to their former owners. The banks and all retail shops were likewise nationalized.

It is a fundamental principle of communism that every citizen must be a worker. It was essential to the proper coördination of industry, moreover, that the workers be employed where they were most needed. In a capitalistic state this allotment is secured thru the wage system, which offers the highest wages where labor is most in demand. But this is contrary to the principle of equality in which the communists believe, and it requires the operation of a price system which they were bent upon destroying. They

therefore resorted quite frankly to a policy which they called the conscription of labor. Workers were treated simply as soldiers to be drafted into the service of the state.

The government was immediately confronted with the necessity of raising funds to meet its expenses. This forced it to do what practically all the governments of Europe did in the World War and reconstruction periods—issue paper money. But the Soviet government followed this practice with more reckless abandon than any other government, because it was their deliberate intention to wreck the monetary system. It is their theory that under communism the use of money must be done away with, to be replaced by a system of moneyless accounting and barter, in which each worker will receive credit for what he does, and receive payments in kind. They thought that if money became utterly discredited, the transition to such a régime would be easier to accomplish. Accordingly, they issued paper rubles in enormous quantities, until by 1923 the number had reached the incredible figure of nearly two quadrillions (2,000,000,000,000,000).[5] Prices soared to dizzy heights, until ordinary household purchases would require thousands or hundreds of thousands of rubles. Meanwhile, strenuous efforts were made to build up a system of accounting, by setting up the banks and other institutions as central accounting agencies and clearing houses, whereby the use of money might be reduced to a minimum. At its height this bookkeeping arrangement had reached a point where it included over four-fifths of all urban production and consumption.[6]

The period of war communism was also characterized by a radical international policy. The communists repudiated the external debts of Russia, which had been incurred during the czar's régime, and they engaged in communistic propaganda wherever they could, in the hope of getting other countries to join the revolution. The result was just what would be expected. Other governments refused to recognize them, and took measures to suppress them.

As a result of this opposition from outside of Russia, and of plots from various non-communist groups within the country, the communists were led to measures of stern repression to protect themselves from downfall. Believing fanatically in the necessity of a minority dictatorship, and realizing that their only hope of carrying out their program lay in the stamping out of all opposition, they deliberately embarked upon a campaign of terrorism against their political opponents. The "Red Terror" became a name to conjure with, not only in Russia, but thruout the world. Many persons were executed. Others were exiled or imprisoned. Members of the aristocracy and others were slain, driven out of Russia, or cowed into submission. Freedom of speech and opposition newspapers were forbidden. By these and

[5] British Trade Union Delegation, *Russia Today* (1925), p. 54.
[6] *Ibid.*, p. 51.

other means, the dictatorship was maintained, and the communist régime became securely established.

The Failure of Military Communism.—The period of military communism was one of complete failure. Industry went into a state of almost total collapse. The railroads were broken down, unemployment was rife in the cities, feeding of the urban populations was difficult, government finances were demoralized. The whole economic life of Russia was practically in chaos—a condition that was frankly admitted by the communists themselves.

It is difficult to state fairly how much of this disaster is to be attributed to the policies of communism, how much to other causes. We must remember that Russia was not the only country to suffer economic disorganization as a result of the World War. Germany, France, England, Italy, Austria, and most of the rest of Europe, were confronted with almost equally difficult conditions, from which they have not yet fully recovered. Nevertheless, a considerable part of the disaster can be attributed directly to the policies of the communists. Their bellicose international program, the endeavor to suppress all private trade and free exchange, the requisitioning of grain from the peasants, the dissatisfaction of local industries at being controlled by the central government, and the deliberate depreciation of the currency, all contributed to the disaster which followed.

The New Economic Policy.—The communist leaders, especially Lenin, were frank in acknowledging their mistakes, and quick to compromize with their ideals when the situation demanded it. Accordingly, in July 1921, a New Economic Policy, popularly known as "Nep," was inaugurated, which involved a partial retreat from communism. Private trade and industry were again permitted, and individual shops and factories were allowed to reopen, in competition with the government establishments. The coöperative stores were given more liberty of action than before, and the strong centralization of industry was somewhat relaxed. Workers were no longer conscripted. Instead, they were permitted to engage in employment on the basis of contracts, fixed by collective bargaining between the unions and private or state employers, but subject to certain regulations. With this there came a more general use of money wages, instead of payment in kind. To overcome the opposition of the peasants, the forcible requisitioning of grain was abandoned, to be replaced by a ten per cent tax on their gross production. However, the urban workers were treated so much better than the peasants, that there was a migration from the country into the cities to take advantage of the artificially inflated wages there. Urban industry was not developed to absorb this influx of population, and unemployment resulted.

To improve their trade relations with other countries, and to secure foreign capital, the communists adopted a more conciliatory foreign policy, and offered concessions to foreign capitalists for the exploitation of valuable

resources, such as mining, lumbering, and even some manufacturing. Because of the risks involved, however, and because the government wanted to maintain control over the concessions, foreign capitalists took advantage of them to only a very limited extent, and most of the concessions that were granted have now terminated.

Finally, the communists set about the gradual restoration of a sound currency, so that by 1924 a stable monetary system had been achieved. The worthless paper rubles were replaced by a new monetary unit, the *tchernovetz*. An idea of the terrific depreciation of the paper rubles may be gained from the fact that when they were finally withdrawn, they were redeemed at a rate equivalent to about one five-billionth of their nominal value![7]

It is apparent that the New Economic Policy represented a sharp reversal from the extreme communism of the preceding period. The inexorable logic of events had compelled the communists to give heed to many economic laws which they had previously held in contempt, as the product of "bourgeois economists." They learned that it was not easy to abolish overnight the system of free exchange, money, and the price system. They learned that, unless they could make people more socially minded, it would be difficult to secure productive efficiency without paying profits to industrial leaders, and without paying money wages to the workers which they might spend as they pleased. They learned that prices could not arbitrarily be raised on some commodities and services without upsetting the natural equilibrium between production in the various industries, and consumption of the products thereof. They therefore resorted to the capitalistic expedients of money, free exchange, some free enterprize, and the wage system to accomplish the economic restoration of Russia.

The Abandonment of the New Economic Policy.—Nevertheless, the New Economic Policy was regarded by the communist leaders as a strategic retreat, rather than as an abandonment of their program. Accordingly, while soviet industry and agriculture were being rehabilitated rapidly under the stimulus of individual initiative and private enterprize, the government was laying the foundations for a more carefully considered socialistic offensive. State and coöperative industry were more cautiously promoted, while private trade was again curtailed. By the fiscal year 1926–1927 this had proceeded so far that 91.3 per cent of the output of the larger ("census") industries came from state establishments, 6 per cent from the coöperatives, and only slightly more than 2 per cent from private enterprizes.[8] Meanwhile the government maintained its complete monopoly of transportation, banking, and foreign trade.

In this year, moreover, production had attained its pre-war level, so that the so-called period of rehabilitation under the New Economic Policy was

[7] British Trade Union Delegation, *op. cit.*, p. 58.
[8] Joseph Freeman, *The Soviet Worker* (1932), p. 39.

concluded, and the period of reorganization and reconstruction along socialistic lines was begun. The failure to attract foreign capital thru concessions left the government free to pursue its policy of socialistic reorganization without possible foreign complications, and it proceeded to do so. The economic machinery for achieving this consists of great trusts, into which the state industries had already been organized. These trusts are largely self-governing, altho subject to considerable oversight from the government in matters of efficiency, development, and profits. There may be several such trusts in an industry, but they are organized into a single syndicate for the marketing of their products and for the purchase of supplies. Some of the smaller producing establishments, and most of the socialized wholesale and retail stores, are in the form of producers' or consumers' coöperative societies. The communists have greatly extended the development of coöperative industry. At the head of this economic system of trusts, syndicates, and coöperatives stands a number of central administrative bodies, with general powers of regulation and control.

Economic Planning in the Soviet Union.—Altho the administration of the vast state industrial organization was considerably decentralized under the New Economic Policy, a significant effort was made as early as 1921 to coördinate the industrial activity of the whole nation according to a definite plan. In the previous chapter we learned that this idea of a centrally planned industry is one of the most interesting possibilities of socialism. It becomes an economic necessity when the objectives of economic activity are no longer the quest for profits under a competitive price economy. To carry out the idea of planning, the soviet government set up a State Planning Commission (usually referred to as the Gosplan), with a central office in Moscow and branches and agents all over the country. It is an advisory, rather than a law-making body, but it has great influence, and to a considerable extent shapes the important economic policies of the government. The Gosplan has a central council, composed of experts along various economic and technical lines, and a number of sub-commissions. Over a thousand employees are included in this organization. The State Planning Commission gathers statistics from all over Russia. By their aid it works out a sort of yearly industrial budget for the nation, appraising the needs and possibilities for this or that branch of production, and devizing longer programs, projecting for five-year periods the reconstruction and improvement of all economic activity. In this work it coöperates with other departments of the government and with the various more or less self-governing industries. The Gosplan coördinates the work of a number of bureaus or sections, each of which performs its specific functions in connection with the preparation of the annual control figures, as well as the more comprehensive five-year plans. Planning is by no means limited to the economic sphere. Among the forty-odd departments of the State Plan-

ning Commission are those dealing with such matters as health, science, art, and education.

The Status of Labor.—The position of labor in soviet Russia is in many ways unique. The great majority of industrial employees are organized into unions, which do not differ greatly from those in capitalistic countries, except that their time, instead of being taken up by disputes with employers, is largely devoted to educational, political, and social activities. Wages and working conditions were formerly fixed by collective agreements, registered with the Commissariat of Labor, and limited to certain restrictions by the Labor Code. However, the wages established in this way were so high that they put the city workers at too great an advantage compared with agricultural districts. Hence the government resorted to regulation of wages. In spite of the communist belief in equality, unequal wages have been found necessary to stimulate the more skilled workers to their best productivity. It should be borne in mind, however, that soviet Russia is at present striving to achieve the lower phase of communism, or socialism, in which the principle of wage payments in accordance with productivity is clearly recognized. Labor has been graded into varying categories of skill and efficiency, with a corresponding scale of "wage coefficients," by which skilled workers get from two to three and one-half times as much as unskilled, and technical experts get from five to ten times as much, according to their rating. These wages are paid in money, but in addition to the money wage, the laborers receive many advantages, such as cheap housing, free tickets for excursions and entertainments, free vacations, working club privileges, recreational facilities, extensive protection in the form of social insurance, and other benefits. It being a workers' government, the working classes are preferred at every turn. The other classes, to the extent that they still survive (especially the private traders), are correspondingly discriminated against, and are gradually being legislated out of existence.

The Reconstruction of Industry.—The first five-year plan, adopted in 1928, called for strenuous efforts to industrialize the Soviet Union. To provide industry with capital equipment, consumers' goods were restricted to the point of scarcity, thus imposing a kind of forced saving upon the people. The program was sufficiently successful to permit an increase in the production of consumables in the second five-year plan. The progress of soviet industry is shown both by official statistics and by the statements of unprejudiced observers. Altho production was very low in 1920, by 1926 it had passed the pre-war level, and it is still increasing. How it will compare in the long run with that of capitalistic countries has yet to be demonstrated.

The vast industrial program projected under the first Five-Year Plan (1929–1933) necessitated for its execution a fundamental reorganization of soviet agriculture. The traditional method of individualistic strip farming,

with the aid of primitive implements, was theoretically, as well as practically, unsuited to the carrying out of the industrial plans. Theoretically, it tended to perpetuate an individualistic agriculture side by side with a socialistic system of manufactures and commerce. The resulting class antagonisms between the urban proletariat and the rural peasantry militated against the creation of a "classless," socialistic society. These frictions threatened the very foundations of the new social order, which the communists were striving to create, particularly in view of the numerical preponderance of the peasant element.

Practically, the primitive agricultural methods made it impossible to provide the agricultural surplus necessary to sustain the rapidly expanding urban population and to furnish the exports needed to pay for imports of industrial tools and machinery. Consequently, the soviet government decided to collectivize agriculture as rapidly as possible. Peasants were induced to assemble their individual landholdings into large fields, and were taught to employ modern machine methods of farming. They were promised the use of tractors and other machinery, expert management, and reduced taxes, if they would agree to join the collective farms. When voluntary action of the peasants did not achieve the desired results, the communists began employing coercive measures, and in so doing aroused the resentment and opposition of many peasants to such an extent that a veritable class war ensued. This agrarian struggle of 1929–1930 has been referred to in Russia as the Second Communist Revolution. It raged with such bitterness, that early in 1930 the government decreed a change in agrarian policy, and since then has employed more peaceful persuasion to induce peasants to join the collectives. This policy has met with considerable success, so that by 1934 85 per cent of the sown area was cultivated by either state or collective farms.

In addition to the collective farms, the soviet government has also organized a number of huge state farms, employing modern industrial methods of production and serving as state agricultural experiment stations. Agricultural colleges, training managers for collective farms, are frequently associated with them.

With agriculture organized along collective lines, the communists hope that, when once an adequate supply of modern machinery has been made available and the necessary managerial personnel has been trained, recurring food shortages in the Soviet Union will be overcome, and a proper balance will be maintained between agriculture and other types of industry. Furthermore, it is maintained by soviet leaders that the distinction between urban and rural workers will tend to become less pronounced as a result of collectivization. Thus the foundations are being laid by the government for what is expected to be a classless society—a genuine workers' commonwealth.

The Educational, Social, and Religious Program.—Altho social-

ism is primarily an economic program, it involves social changes as well. It is interesting to note what the communists are doing in this regard.

Russia was always a nation of extreme illiteracy. Most of its people were ignorant peasants, without even the rudiments of an education. The communistic theory of evolution requires an intelligent working class. Therefore the communists have resolutely set about the upbuilding of a universal school system, under the supervision of the Commissariat of Education. It is generally agreed that the government is pushing the extension of this system quite rapidly, with the object of banishing illiteracy as soon as possible. Attention is also paid to art, music, the drama, and other cultural needs.

An equally energetic effort is being made to combat disease and dirt, both of which have heretofore been a great curse in Russia, especially among the peasantry.

An extensive system of social insurance has been created, which protects the workers and their dependents against such contingencies as death, sickness, accident, etc. Pensions are provided for old age. This does not differ greatly from the social insurance systems of other European countries.

The impression quite generally prevails in this country that the institution of marriage has been deliberately destroyed by the communists. This is not the case; but it is true that there have been some modifications in the status of matrimony. Religious marriages are not recognized, the only legal ceremony being a civil one; but this is a rule which prevails in many non-socialist countries. Divorce can be freely obtained, without giving any reason for it, if both parties consent. Family life is somewhat different from that to which we are accustomed. The home is not as important a factor in the lives of the people, partly because the housing situation has been so acute that families were very much crowded, and partly because the workingmen's lives have been so filled with the new activities of clubs, political meetings, lectures, evening classes, theatres, concerts, etc. It is apparent that these features are going to make profound changes in the social life and institutions of the people.

It is true that the communists have carried on an anti-religious propaganda. While there is complete religious toleration (so long as the church does not become a center for anti-revolutionary activity), the communists do not approve of religious organizations, and are deliberately trying, in the schools and elsewhere, to break down religious beliefs. In spite of the anti-church propaganda, observers report that religion still has a strong hold on the Russian people. The Orthodox Church still survives, but its property has mostly been confiscated, and its priests, who were formerly paid by the czarist government, must now be supported by their congregations with voluntary contributions.

An Appraisal of Sovietism.—For some years after the Russian Revo-

lution of 1917, non-partisan appraisals of the soviet system were accompanied by statements that definite conclusions were difficult. This was a result of the belief that the movement was still incomplete. As has been pointed out previously, the communists themselves held to the belief that their final goal had to be achieved by means of a progression thru the successive stages of a proletarian dictatorship, and socialism, before the establishment of pure communism was possible. It may be that this historical process is still incomplete. However, it would seem fair to inquire whether developments thus far yield any evidence which would lead us to believe that Russia is at least making steady progress in the direction of the ultimate goals which the communists set for themselves at the outset of their experiment.

In the political sphere the communists have envisaged a progressive extension of the democratic principle, accompanied by a simultaneous diminution of the power of the state. This development was to reach its climax with the attainment of the classless society and the complete disappearance of the state. Even the communists themselves could scarcely maintain that political democracy did, in fact, exist in Russia prior to 1936. Only the city and village soviets were elected directly by the people. Voting was not by secret ballot. Numerous groups were denied the franchise. Elections were deliberately dominated by officials of the Communist Party. The election system gave a preponderance of power to the city workers. All these restrictions upon democratic rights were, however, justified by the communists on the ground that it was necessary to solidify their position and protect themselves against counter-revolutionary action by minority elements within the population. Such restrictions could and would be abandoned once the permanence of the new system had been secured. The adoption of the new constitution in 1936 was hailed as proof of this contention. Under this new charter Russia was claimed to have achieved the highest form of political democracy. It may be that the present Russian political structure represents communist democracy, but it is emphatically not democracy as we in this country conceive of the term. Only one political party is allowed—the Communist Party. In the first election held under the new constitution only a single candidate was offered to the voters in all but a handful of electoral districts. The overwhelming majority of government positions are held by the small minority of the population which holds membership in the Communist Party. Free speech, free assemblage and other civil liberties are nominally granted to all but the insane and the criminal—but those who oppose the régime are regarded as belonging to one or the other of these categories! There has been widespread terroristic suppression of all opposition and wholesale executions of prominent men. The constitutional liberties are apparently meant only for supporters of the government, and the government, of course, determines who shall be regarded as supporters and who as enemies. There appears to be no limit to the power of Stalin, who heads the

government. All in all, Russia must be regarded as a dictatorship, not a democracy. The most significant fact, however, is that, after twenty years of soviet rule, despite the theories of communism with regard to the state, there is really less, rather than more, democracy than there was at the time of Lenin's death.

The educational and social work of the soviet government is more meritorious. Probably no government has ever before embarked on so ambitious a program of educational, social, and cultural advance. The school system is still in a state of development, and does not yet equal that of such countries as Germany or the United States, but it is being rapidly extended. The system of social insurance perhaps is paralleled by some of the other countries of Europe, such as Great Britain and Germany. But the systematic promotion of lectures, art, music, drama, housing arrangements, sanitation, and health is probably unique. It may be criticized as paternalistic, but it appears to be getting results. The divorce laws may be thought to lessen the stability of marriage, but they are not more lenient than those advocated by many enlightened thinkers in more conservative circles. More serious is the effect on family life of the new cultural standards which make the club, the school, and the theater the center of social contact, instead of the home. This may tend to destroy some of the finer traits of character which we have come to cherish, but it is too early yet to say. The anti-religious trend, likewise, will be severely condemned by most persons. We do not yet know whether it will actually lessen the hold of religious ideas upon the Russian people; nor, if it does so, what the effects will be. Whether, in such an event, the schools and the communist culture will provide a moral influence equal or superior to that of the church, it is almost impossible to foresee, but if it does not, one may well view the prospect with apprehension.

Most significant and engrossing is the communist economic program; and on its success or failure, in the long run, the word's judgment of the present soviet government is likely to be based. The essential principle of socialism—the ownership and operation of industry by the state and its development according to a comprehensive plan (altho the democratic management is as yet but partial)—has so far survived and may prove to be efficient. The details of the economic organization which the communists are evolving—the consolidation of industry into self-governing trusts and syndicates, the coöperative stores and factories, the nationalization of railways, banks, and agriculture—these deserve to be studied and watched without bias and with the closest attention. Above all, the attempt to coördinate the entire industry of a nation as vast as Russia into a unified system, under the agency of the Gosplan, is a daring and gigantic experiment which may prove of great value to the world; for there can be but little doubt that in every nation there is going on an evolution toward greater unification of

industry, whether along socialistic or capitalistic lines, and the experience of Russia in attempting to handle so tremendous an organization is sure to reveal much by which others can profit. However, in the economic sphere, as well as in the political, the communists seem in some respects to be moving away from, rather than toward, their ultimate objective. Economic inequality, in terms of wage differentials and special privileges, is becoming increasingly more pronounced. Under the Stakhanovite speed-up system a favored group of workers is appearing. The attainment of economic equality is further hindered by the creation of a political and party bureaucracy.

If the Russian experiment with state socialism should fail, it can hardly be construed as proof of the fallacy of socialism. We must remember that the communists represent the extreme radicals of the socialist movement, and that more moderate socialists are violently opposed to the violence and lack of democracy in their program. The attempt of the communists to force socialism into existence by extreme measures in a backward, agrarian country does not necessarily afford any indication of how socialism might work if evolved by more gradual steps, in advanced industrial nations and in the hands of more conservative leaders.

Despite the persistence of underground opposition to the government (an opposition which has secured the support of prominent men formerly high in the councils of the Communist Party) there is no indication that the present régime is about to collapse. However, a state based upon a dictatorship necessarily rests on a shaky foundation. That Russia has made economic progress is undeniable, and she will probably continue to do so. But it is doubtful whether this is sufficient compensation for the increasing repression. The goal of communism appears to be fading into the background. It will probably continue to do so until it ceases to be a definite objective. But it does not seem likely that socialized industry will be abandoned.

B. Fascism

The Origins of Fascism.—The working-class unrest and discontent, which, in Russia, led to the revolution of 1917, was not absent from other European countries. In the post-war period this unrest was translated into support, in the political sphere, of the social democratic and newly formed communist parties of Europe. In Germany the Social Democrats constituted the predominant party in the new republic. In Hungary the communists, under Bela Kun, held control of the government for a brief period in 1919. The social democrats gained office in Vienna, where lived two-thirds of the population of the greatly reduced state of Austria. The 1919 elections in Italy gave the Socialist party the largest number of seats in the parliament. Elsewhere the politically organized strength of the working-class was demonstrating a marked increase in power.

Dedicated, as it was, to a fundamental change in the economic balance of power, and constituting a not inconsiderable threat to long established property rights and vested interests, it is not surprizing that this socialist trend aroused a very real fear in the minds of the middle and upper classes of Europe. From the creation of this fear it was but a short step to the formation of an organized opposition to the socialist movements. To be effective this opposition had to succeed in winning a degree of mass support by promises of aid to the working-class and, at the same time, enlist the support of the middle and upper classes by its opposition to the collectivist program of the socialist parties. Appearing first in Italy and later in other countries, where it assumed slightly different forms, this movement of reaction against the spread of socialism is now called by the general term *fascism*. Beginning with Mussolini's march on Rome in 1922, fascism has since spread thruout central Europe and has even made its influence felt in Central and South America.

The Philosophy of Fascism.—Whereas the communist experiment in Russia was an attempt to carry out a philosophy which had been propounded in large measure over fifty years before the revolution, the fascist experiment rests on no such clearly formulated program. The product of peculiar post-war conditions, largely anti-intellectual, opportunistic in methods, it has tended to minimize the importance of a theoretical basis. However, regarding Italy and Germany as the outstanding examples of fascism in action, it is possible to discover and indicate certain characteristics of the movement which appear to be possessed by it in whatever country it succeeds in establishing itself.

Fascists are severe critics of political democracy. Their emphasis is upon the duties of the individual rather than upon his rights. The mass of the people is regarded as fit only to be led. In support of their opposition to democracy they point to its hesitancy, partisan political bickerings, and time-consuming debates. These characteristics of the democratic process, considered in connection with the fascist conception of the state, appear to constitute insurmountable obstacles. For fascism has developed the idea of the totalitarian state. The state to the fascist is absolute. It is not merely the sum of the individuals who compose it; it is something above any individual, having a life and being of its own. It recognizes no power greater than itself. Moreover, it admits of no field from which the state shall be excluded, nor even in which it shall exercize a divided sovereignty. Thus it insists upon exerting its domination over educational, religious, scientific, and artistic institutions. All national institutions and agencies exist for the service of the state alone. The highest obligation and duty of the individual is a contribution to the power and unity of the state. The only right which the individual, as such, possesses is the right to assist in the strengthening of the state.

This emphasis on the supremacy of the state is inevitably accompanied

by an extreme nationalism. Here is a clear contrast to the class internationalism of socialism. Fascism stresses the purely national virtues, in many cases developing likewise an acute racial consciousness. Flowing from this nationalistic spirit is an expansionist sentiment in the form of an extreme imperialism. Fascism has nothing but contempt for pacifism. War and the pursuits of war are glorified. In battle for the state, the individual, as a soldier, finds his greatest glory and satisfaction; thus he fulfills the highest privilege which is accorded him. International relations rest not upon a basis of international law and morality, but upon the test of military prowess. Strength alone gives a nation the right to possess territory. It forfeits its right to such possessions as it cannot defend. Thus the fascist philosophy leads its followers to seek that continuous national expansion which its conception of power politics serves to justify.

The Economic Aspects of Fascism.—Presenting itself as a defender of the nation against the revolutionary implications of communism, fascism pays lip service to capitalism, particularly the capitalism of earlier days. Relying upon the upper class and the small property-holding middle class for the bulk of the support which it requires to achieve power, it calls for the preservation of the institution of private property which communism threatens. In practice, however, traditional, liberal, *laissez-faire* capitalism almost completely disappears under fascism. While private enterprize is stated to be the most effective method of production and distribution, the exercize of a considerable degree of state regulation is considered essential for the promotion of economic stability and the full utilization of productive resources. A unified and centrally directed economic program is regarded as essential. Thus every privilege accorded to private property is hemmed about with qualifications.

The fascists regard the sole function of an economic system to be service to the state. As a consequence, private initiative is left unfettered only so long as it operates in a manner satisfactory to the government. The private enterprizer is held responsible to the state for the direction given to production. When private initiative is lacking, or is regarded as inefficient, state intervention is permitted. Since the state is the sole judge as to whether private enterprize is or is not efficient, we find that in reality the rights of private enterprize are very uncertain. The power of the state in economic matters is supreme, and property is left in private hands upon the condition that it be used in accordance with the direction of the state—which means, of the governing authorities.

The state assumes the right to distribute the essential factors of production and to direct the flow of raw materials and credit. It requires the securing of a license before new plants can be erected or old ones expanded. It assumes the right to fix wages, rents, interest rates, and even, in certain cases, commodity prices. The agriculturist must look to the state for instruc-

tion with regard to the crops which he shall raise, where his product may be sold, and the price he may charge. There are those who feel that, in the economic sphere, fascism is drifting inevitably in the direction of state socialism. At all events, it can no longer be regarded as a capitalist economy, operating under a changed political structure, as it once pretended to be.

Severe limitations upon the free exercize of private initiative would appear inevitable when it is realized that the primary aim of economic activity under fascism is not the attainment of the highest possible standard of living, as presumably it is under both capitalism and socialism, but a continuous increase in the military power of the state. With this as its objective, the fascist state operates always on a basis of war-time economy. Productive factors are diverted to armaments at the expense of consumers' goods. A considerable proportion of the national income is devoted to the maintenance of a large army and the financing of imperialist adventures. The extreme nationalism of the fascist state impels it to seek a maximum of self-sufficiency, that it may become economically independent of other nations. Thus it is compelled to sacrifice the advantages of geographical specialization and foreign trade. Concentrating its productive efforts in many fields to which it is ill-adapted, it suffers, of necessity, a further reduction in the prevailing standard of living. Faced with the utter impossibility of meeting many of its needs by means of domestic production, it turns to the discovery of substitute products and the development of synthetic materials and commodities. The result of all these practices is a reduction in the quantity and quality of such goods as are produced, and a sharp decrease in the real income of the people.

The changed goal of the economic system, together with the limitations upon private initiative, have forced the fascists, like the communists, to seek a new incentive for economic activity. This new incentive is provided by their nationalistic glorification of the state. The population is exhorted to choose bullets, the symbol of the power of the nation, in preference to bread, the symbol of mere individual well-being. Material concessions in the way of living standards are demanded in the interests of the state. Spartan self-sacrifice is regarded as one of the highest virtues, when the consequence is the increased military might and self-sufficiency of the nation.

Fascism in Italy.—The government of Italy represents centralization of power carried to an extreme. Normally a monarchy, the supreme governing body of the country is a cabinet composed of the heads of fourteen ministries. The ministers are appointed by the king upon the recommendation of the Prime Minister, Mussolini. Since there is nothing to prevent the Prime Minister from recommending himself, Mussolini usually holds half or more of the cabinet posts. The principal official in each of the ninety-two provinces is a prefect appointed by the Minister of the Interior, who is Mussolini. The *podestas,* most powerful municipal officials, are likewise appointed by the

Minister of the Interior. There is an elected Chamber of Deputies, but the voters are given the right merely to accept or reject a single hand-picked list of four hundred names which is presented to them. The chamber has never had any rôle other than that of a rubber stamp. In fact, the chamber may not even discuss a matter without the approval of the Prime Minister. Only one political party is allowed, the Fascist. It is, if possible, even more inextricably linked with the government than is the Communist Party in Russia. The Grand Council is the highest organ of the party, and to it is accorded the privilege of selecting the candidates for the chamber whose names shall be submitted to the voters. To it is also given the right to select the successor to Mussolini.

Fascist Italy's principal contribution in the economic field has been the development of the corporative structure. Twenty-two corporations have been set up in various industries, trades, and public services. These corporations are presided over by councils composed of employer and employee representatives, technical experts, and Fascist Party representatives. The president of each council is Mussolini, acting this time in his rôle of Minister of Corporations. The various councils, joined together, constitute the National Council of Corporations. The corporations are charged with the responsibility for the improvement and development of production in their particular fields. It should not be thought, however, that these councils are independent, deliberative bodies. They, too, are caught in the web of fascist centralization, and are officially dependent upon the Ministry of Corporations.

In addition to the corporate structure, Italy has created nine so-called confederations, which are charged with the establishment of employer-employee relationships, and the formulation of labor contracts. In each of the branches of production, classed as industry, agriculture, commerce, and credit and insurance, there are two confederations, one representing the employers, the other the employees. A single confederation exists for professional workers. Again the ever-present hand of the state is seen, for, while the confederations can elect their own officers, those chosen must be approved by the Minister of Corporations and are removable by him. Further, when labor disputes arise, strikes and lockouts are forbidden. The controversy must be referred to a Labor Court whose members are appointed by the state. The findings and decisions of this court must be accepted. When it deems necessary, the court is also empowered to write a labor contract which is binding upon both employers and employees.

German National Socialism.—Altho adopting the name National Socialism, the present government of Germany possesses all the general characteristics of fascism as already set forth. It has secured the centralization of political power by making the national cabinet, headed by Hitler, the sole possessor of legislative and executive authority in the entire nation. State legislatures have been abolished, and even municipal authorities are directly

responsible to the national government. Again we find but a single political party, this time the National Socialists. Again there is a parliament, the Reichstag, totally devoid of all power. In Germany the nationalistic fervor has been carried to even greater extremes than in Italy. Not content with mere economic independence, the German state lays claim to racial and cultural independence and superiority as well. This belief has found expression in a ruthless persecution of the Jews and a vigorous attempt to establish a purely nationalistic religion.

Attaining power much later than the fascists (1933), the national socialists have not yet developed so coherent a philosophy and program. In general, however, they would appear to be moving in the same direction. The recently established "estates"—in agriculture, industry and trade, transportation, handicrafts, and labor—possess certain characteristics which make them comparable to both the Italian corporations and confederations. These estates are charged with the planning and control of economic activity, including the problems of labor relations, in their respective fields.

An Appraisal of Fascism.—It must be admitted that, from the point of view of getting a political or economic task accomplished, fascism, with its undivided authority, is more efficient than a democracy. But the strength of a democracy may lie in its very weakness. The choice of the task to be done and the policy to be followed is one of very great consequence, and in a system which recognizes individual rights, these choices are made by the citizens or their representatives. Those who believe in the importance and dignity of the individual will not readily sacrifice this democratic method of policy determination for the sake of increased mechanical efficiency. This reluctance would be increased when, as under fascism, the efficiency secured by the sacrifice of individual rights is not utilized for the increased well-being of the population, but merely to further the might of a state which lays claim to an existence apart from its citizens.

There are few non-fascists who will subscribe to the fascist glorification of war. This product of its nationalistic emphasis has produced chaotic conditions and the continual threat of war in Europe during recent years. It has forced dictatorships and democracies alike to dissipate a large portion of their productive resources in the manufacture of armaments, and thereby delayed indefinitely the further progress of social legislation and reform. It has reduced markedly the volume of international trade and forced all countries to abandon, to a greater or lesser extent, the concentration of productive agents in those fields where they could be utilized most effectively.

In both Italy and Germany the government budget is heavily unbalanced and indebtedness is rapidly increasing. In recent years prices have risen faster than wages, with a consequent reduction in real income for the mass of the population. The shortage of supply in the case of certain consumers' goods is becoming serious. The people are forced to employ, in many cases,

inferior substitute commodities. It must also be realized that employment and incomes have been very largely dependent upon the armament industries and military service. In view of the financial condition of the governments it is doubtful how long such heavy expenditures for these non-productive purposes can continue. Should they cease, there might be so precipitous a decline in the standard of living that the position of the present rulers would be seriously endangered. The fascist dictators have heretofore shown a tendency to meet internal unrest by embarking upon expansionist adventures in order to divert the population from their immediate problems. The time is not far distant when further attempts at expansion must meet with the determined opposition of the democracies. When that time comes the fascist nations must choose between plunging Europe, and possibly the world, into another war, or so modifying their economic program as will permit them to provide the masses of their people with a higher standard of living than they are now receiving. It is probable that fascism, in self-sufficiency, has set for itself an unattainable goal. So long, however, as it continues to seek that goal, there can be no assurance of peace and no economic stability—in Europe, at least, and possibly thruout the world. Nor can any nation, following such a policy, provide for its people the standard of living which would be possible under a policy of geographical specialization, free trade, and a minimum expenditure on implements of war.

Summary

The first experiment with socialism on a national scale is to be found in Soviet Russia, where the communists have maintained a strict dictatorship since 1917. Their theory is that society must pass thru four stages, *viz.:* bourgeois capitalism, dictatorship of the proletariat, the socialistic society, the communist society. They first established a government consisting of a hierarchy of soviets (workers' councils), beginning with city or village soviets and culminating in an All-Union Congress. This political structure was modified in 1936, and a directly elected, two-house Supreme Council was substituted for the All-Union Congress. The first period of their régime, known as that of military communism, was one of extreme radicalism, in which industry was nationalized, labor was conscripted, money was inflated, international hostility was promoted, and terrorism prevailed. It failed, due largely to the mistaken economic policies of the communists. A New Economic Policy was then adopted which restored a good deal of private trade, permitted freedom of employment, leased valuable concessions to foreign capitalists, and established a sound monetary system. When production reached its pre-war level (in 1926–7), the New Economic Policy was abandoned and a socialistic program was more carefully pushed. Most of the

industry is now nationally owned, being operated by largely self-governing trusts, syndicates, and coöperatives. The primitive, individualistic agriculture of the peasants is likewise being socialized by a system of state and coöperative farms. A significant feature of the entire system is the State Planning Commission (Gosplan), which formulates a coördinated program for the development of the whole Union. Labor is organized, wages being divided into various categories under state regulation. The communists are also carrying out an extensive program of educational, social, and anti-religious work.

The political structure of soviet Russia is unwieldly and, despite its pretense of democracy, dictatorial. Its educational and social work, except for its effects upon the family and church, is good. Its economic program is an interesting experiment—especially the Gosplan, but it cannot be taken as a conclusive test of socialism.

As a reaction to the spread of socialism, there sprang up the fascist movement. This philosophy, now dominant in Central Europe, substitutes for democracy the totalitarian state. It represents an extreme form of nationalism, which is often accompanied by an emphasis upon racial consciousness, and imperialism. In the international sphere it fosters the spirit of power politics. As regards its economic aspects, fascism results in the almost complete disappearance of the traditional characteristics of capitalism. While private property remains largely in private hands, the power of the state to interfere in economic affairs is unlimited. The economic system is conceived of as functioning solely in the interests of the military might and unity of the state. As a result, productive factors are provided first for the creation of armaments. A further corollary of this conception is the attempt to secure national economic self-sufficiency, even at the expense of a considerable reduction in the standard of living. An emotional satisfaction, derived from service to the state, is relied upon to furnish much of the individual incentive to productive effort.

Fascism in action is typified by the present governments of Italy and Germany. In both of these countries we find an extreme centralization of power. Only one political party exists, and it is inextricably linked with the government. Unified, centrally directed, economic planning is sought thru corporations in Italy, and thru "estates" in Germany. Control of these agencies is maintained by the national government.

The fascist structure may make for greater efficiency in the performance of a particular task, but it does so by sacrificing individual rights. The economic position of the fascist governments is now precarious. This is largely the result of the armament and self-sufficiency programs. It would appear that, in the near future, these countries must solve their present problems by territorial expansion, involving the threat of war, or by a modification of their present economic policies.

SUGGESTIONS FOR FURTHER READING

A clear statement of the theories and policies of communism, written for popular reading, is N. Buharin and E. Preobrazhensky, *The ABC of Communism* (English translation, published by the Communist Party of Great Britain, 1922). Ethan T. Colton, in *The XYZ of Communism* (1931), strives to show what certain of these theories involve when translated into terms of action. Another excellent theoretical study is entitled *The Marxian Theory of the State* (1931), by Sherman H. M. Chang, in which the author shows the application of Marxism in soviet Russia.

Two very satisfactory all-round surveys of the Russian situation are contained in *The Economic Life of Soviet Russia,* by Calvin B. Hoover (1931), and the scholarly treatise by Elisha M. Friedman, entitled *Russia in Transition: A Business Man's Appraisal* (1932). An earlier book, but one of the most illuminating that has appeared in English, is Maurice Dobb's *Russian Economic Developments Since the Revolution* (1928). For a careful and detailed analysis of the economic aspects of sovietism, prior to the New Economic Policy, Leo Pasvolsky's *The Economics of Communism* (1921) is excellent. More recent books of merit which deal with Soviet Russia include W. H. Chamberlin, *Russia's Iron Age* (1934), which is a vigorous criticism of the methods of the government; and Sidney and Beatrice Webb, *Soviet Communism* (1936), which is a favorable description, stressing the political and social aspects, rather than the economic.

Luigi Villari, an Italian professor of social sciences, defends the fascist régime in his *The Fascist Experiment* (1926), and his *Italy* (1929). Excellent recent studies of Italian fascism include H. W. Schneider, *The Fascist Government of Italy* (1936); and G. Salvemini, *Under the Axe of Fascism* (1936). The latter, while critical, is ably documented with data from official sources. For an able demonstration of the relationship between government and economic activity in present-day Germany see F. M. Marx, *Government in the Third Reich* (1937). A very good discussion of the economic problems of Germany under fascist control is to be found in P. Einzig, *Germany's Default: The Economics of Hitlerism* (1934).

M. T. Florinsky, *Fascism and National Socialism* (1936), traces the rise of fascism and its consequences in both Italy and Germany. W. H. Chamberlin's *Collectivism: A False Utopia* (1937), finds striking resemblances between the communist and fascist states in both their political and economic policies.

W. N. Loucks and J. W. Hoot, *Comparative Economic Systems* (1938), gives an excellent comprehensive treatment of socialism, communism, and fascism as economic systems, with a discussion and appraisal, from an objective point of view, of their operation in Russia, Italy, and Germany at the present time.

CHAPTER XXX

ECONOMIC PLANNING AND ECONOMIC PROGRESS

A. Economic Planning as a Means to Progress

What Constitutes Economic Progress.—We have now considered in some detail most of the important economic problems which confront the present generation, and various measures which may be taken to solve them. It is time to view these problems as a whole and to bring the suggestions together into a complete program of economic progress. Economic progress is one phase of that general improvement in society which we call social progress. It is hard to define just what we mean by progress. We know that it implies change, but not all change is progressive. Societies may weaken and decay, or they may improve in strength and character. Progress is change in the right direction, but what direction is right? Some say that the goal of progress is adaptation of man and his social organization to the changing physical and institutional environment; others that it is the fullest development of human character and personality. Still others believe that the ultimate test of it rests in our intuitive judgment of what is good and desirable.

We must leave the final answer to these questions to the philosophers, but we can obtain a more definite idea of what we mean by *economic* progress if we return to the discussion of economic welfare, or prosperity, with which we began the study of applied economics. *Economic progress is merely increasing economic welfare.* It involves, therefore, the same four elements which we set up as our standards of prosperity. Economic progress for any nation requires: (1) continuous increase in the real income of its people; (2) continuous improvement, thru better standards of consumption, in the character of the goods that go to make up that income; (3) a decrease in the relative amount of effort, the use of material resources, and the sacrifice of human health and happiness, involved in the production of that income; and (4) the greatest possible diffusion of the income among the members of society. The whole of this volume has been devoted to the consideration of means whereby these objectives may be attained.

Economic Progress and the General Welfare.—We have defined economic progress very largely in material terms, but this does not mean that we are materialists. We must stress again the statement of the first

chapter, which explained that economic welfare is only one part of general welfare. We are not unmindful of the fact that social progress cannot be achieved by economic means alone. Mere increase in goods, even of a desirable kind, and their dissemination among the people, is not enough. We must cultivate the other things of life as well. But we live in a world of specialists, because our minds are so finite that we cannot handle thoroly more than one thing at a time. So the economist must concentrate his attention on problems of economic welfare, leaving the broader aspects of progress to others. He may do this with the assurance that the economic phase of progress is a very important one, for man must first meet his material wants before he can devote his time to the higher aspects of his existence, and wealth is a stepping-stone to many of the other things that we desire.

The Classical Prophecy of a Stationary State.—The classical economists, whose views dominated the economic thought of the nineteenth century, did not believe that sustained economic progress was possible. It must eventually be blocked, they thought, by the increase of population and the principle of diminishing returns. These two forces would sooner or later bring society to a stationary condition where further growth or increase in prosperity would be impossible. This conclusion was based on the following reasoning: Accepting unqualifiedly the teachings of Malthus, they believed that population was always pressing closely upon the means of subsistence. The large supply of labor which resulted from this pressure kept wages at a level barely sufficient to provide the essentials of life. They could go no higher, except temporarily, because a rise in wages would permit more people to be reared in each family, and the rapid increase in numbers would soon force wages back to a subsistence level. Under these circumstances, the only way that progress could take place was by an increase in the accumulation of capital, which would make it possible to support a growing population. The growth of capital depends upon saving, the principal inducement to which they believed to be profits or interest (they did not distinguish the two). Now profits were said to be fixed by the surplus above what is necessary to support labor, produced at the margin of cultivation, where the poorest lands were in use. The differential excess obtained on better lands did not go into profits, for it was absorbed as rent by the landowners. Profits must necessarily fall as population and capital increase, for such increase can take place only by bringing into use poorer lands, where the product will be less than on the former margin of cultivation. Since wages cannot be forced below subsistence, the decrease in product must come from the share of the capitalists, whose profits will be forced ever downward, until they are barely sufficient to attract enough savings to repair the depreciation on existing capital. When this point has been reached, the margin of cultivation can go no

lower, and there can be no further growth of population, for there is no more land capable of supporting it, and no capital to give it employment. Society will then have reached a stationary state, and economic progress will cease. Not all writers who held this view regarded the stationary state as a gloomy or undesirabe one. Some, at least, believed that it would afford opportunity for mankind to devote its attention to progress of a higher type, cultivating the fine arts and moral virtues, instead of seeking an increase in material goods. At best, however, it was a pessimistic prospect, and justified the critics of political economy (as economics was then called) in naming it "the dismal science."

A More Optimistic Prospect.—If the classical prediction of a stationary state of society is true, it is useless for us to talk further about economic progress, and all hope of achieving the condition of economic welfare which was outlined in the opening chapter is illusory. But we need not surrender to so pessimistic a doctrine. The classicists reckoned without progress in the arts. They did not foresee the enormous strides in technical advance which were to come from science and invention. The remarkable mechanical and scientific developments of the past century have made possible an increase in the economic well-being of mankind which surpass the wildest imaginings of previous generations. Steamships, railroads and automobiles, and now aviation, have made isolated regions accessible for productive use, thereby greatly increasing the total area upon which civilized man may depend for the foodstuffs and raw materials essential to his continued prosperity. Chemistry has devized new processes for the utilization of natural resources. Biology has taught means of increasing the yield of crops, of improving the quality and variety of natural products, and of combating the diseases and pests which would interfere with their growth. Physics has given us principles to apply in the construction of marvelous machines, new processes of construction, and sources of tremendous power. So long as these developments can proceed fast enough to offset the tendency to diminishing returns (and there is no apparent reason why they cannot do so), sustained economic progress is possible. The product at the margin of cultivation can be steadily raised and there need be no decline in the output of industry which would check the accumulation of capital.

There is one possible obstacle which might interfere with this advance. We learned in Chapter X that if the growth of population among the peoples of the world continues to increase at its present rate, it may swallow up the increase in production and bring mankind face to face with a serious shortage of foodstuffs and raw materials. No amount of technical improvement can offset the fact that there are physical limits to the number of people which our planet can accommodate, and the time must some day come, if it is not already here, when the increase of numbers must be

checked. If we control the growth of population, however, we can forestall the prospect of want, and by keeping our numbers at the optimum a large population can be supported on the earth at an ever-increasing level of prosperity. We have seen that there is already a decline in the birth rate among Occidental people, and that the specter of overpopulation can be dispelled. We have every reason to expect, therefore, that with the application of reasonable intelligence in social matters the further economic progress of our race is both possible and probable.

The Proposal for Planned Control.—Such progress as we have made hitherto has depended largely on individual initiative in a system of relatively free enterprize. However, this reliance upon independent individual action leads to a lack of coherence, a disharmony, that accounts for many of the economic problems confronting us today, which have been the subject of investigation in this volume. This is especially true of those general tendencies to instability in the economic process which result in its periodic breakdown, as revealed in business depressions and cyclical or chronic unemployment. We have found that, in wrestling with the various problems of maladjustment which characterize our economic world, an increasing measure of interference with individual freedom has become necessary. We are tending toward more and more governmental intervention and control of economic activity. So far, this intervention has progressed by a series of isolated steps—a law forbidding some harmful practice here, a regulatory commission established there, or a subsidy somewhere else. Many students of economic problems are beginning to wonder whether these scattered measures of reform cannot be welded into a unified program built around a carefully formulated general plan. They visualize some sort of centrally organized, coördinated control of the economic process as a whole, in place of the extensive reliance upon individual judgment, working under the influence of the forces of supply and demand, which has hitherto characterized our economic policy. This type of unified control is generally known as *economic planning*.

Current interest in proposals for economic planning appears to have had its origin in a number of sources. For one thing, the serious lack of economic balance which has pervaded most of the civilized world since the World War leads people to wonder whether there is not something basically wrong with our economic organization that calls for reforms of a more fundamental character than the piecemeal measures which have been tried up to this time. The Great Depression, with its unprecedented unemployment, has strengthened this feeling. Further questions about the soundness of our system have been raised by the revolutionary overthrow of capitalism in Russia, Italy, Germany and elsewhere. At the same time, the Russian five-year plan has aroused a great deal of interest. Here, it is said, is an idea that might be incorporated into the weakening framework of capitalism, to give it needed

strength. Would not some form of national planning be the logical outgrowth of that increasing trend toward government control of industry to which reference has already been made? All of these things seem to point in the direction of planning. In this country they were among the motives that led to the adoption of the National Industrial Recovery Act, which has been referred to elsewhere in this volume. That act definitely aimed, among other things, at a system of nation-wide planning in respect to wages, hours, trade practices, and, to a certain extent, prices and production for the various branches of industry. Altho the scheme was quashed by the Supreme Court, the publicity attending it during its short-lived existence gave the idea of planned industry a strong hold on the thinking of the American people, which has not entirely lost its force.

Looked at from another point of view, it can be argued that economic planning is in line with the apparent destiny of man to extend his control over his environment. The application of scientific methods to the study of natural phenomena has given him a remarkable degree of mastery over the material world. Is it not to be expected that he will soon extend this control to the social world also? Should not the substitution of conscious guidance in the industrial sphere, based upon economic science, lead to improvements comparable to those which have been attained by the application of chemistry, physics, and biology in their respective spheres? The planners believe that these questions should be answered in the affirmative.

An economic system based upon self-interest and free enterprize can be compared to an uncultivated field, in which various forms of vegetable life struggle for survival. Grasses, weeds, and fruits contend for a foothold in the soil and grow up under crowded conditions where many of them perish, but where many nevertheless manage to survive and develop with a certain measure of success. However, none of them attains that degree of perfection which is possible under carefully directed human control. Man takes the most promising grasses, sows their seed in carefully prepared soil, provides it with fertilizers, and definitely does away with competitive struggle by weeding out all the other varieties of plant life which might contend with the one whose growth he is trying to promote. As a result, he gets a harvest of wheat far superior to any of the grains which nature provides by her methods. Or, he may take some wild strawberry plants from the field, and, by artificial selection of the best stocks and their cultivation under the most suitable conditions, produce strawberries which put those of nature to shame. Advocates of economic planning believe that it would achieve something comparable to the cultivated field in the realm of economic life. It would substitute carefully directed central control for the unplanned competitive process on which we still so largely rely.

Partial Contrasted with General Economic Planning.—Of course, the present economic order is not entirely devoid of conscious guidance.

Here and there a considerable measure of planned activity is to be found in it. Some of this is private in character. For instance, the operations of each individual business enterprize are planned and directed by its manager or managers. The growth of integration in industry greatly extends the scope of privately centralized control. Trade associations and chambers of commerce are also introducing a small degree of coördination into private business activity. Other partial planning is done by the government, which, thru its various measures of intervention, is directing different sectors of economic life in accordance with objectives of public policy. There are isolated laws, such as those prohibiting gambling and prostitution and those forbidding combinations in restraint of trade, which are designed to prevent the growth of economic activity in directions deemed undesirable. There are other laws, such as those providing for ocean steamship subsidies and protective tariffs, which are designed to encourage activity in fields considered desirable. In a few cases the state owns and operates entire industries, such as postal service and highway maintenance. It shares in the direction of certain others, such as public utilities and banking. Controls of the latter type are growing in scope toward the point where they may be regarded as attempts by the government to plan for an entire branch of production. Examples of this are the proposed consolidation of railroads, the Tennessee Valley Authority, and the work of the Federal Power Commission, which is endeavoring to plan a coördinated scheme of power supply for the United States.

However, none of these measures, nor all of them taken together, constitute *general* economic planning, for they are not consolidated into a unified whole. Indeed, they often work at cross-purposes. The operations of an integrated industry may be carefully planned, but the plan is directed at benefiting the business men engaged in it, who may be seeking their own gain at the expense of the rest of society. There is certainly no assurance that such integration will keep the industry in balanced adjustment with other industries, or that it will promote the smooth functioning of the economy as a whole. Even the various measures of governmental control are not always consistent. Much of our legislation is the result of pressure from organized groups who are seeking to promote their own interests, rather than the result of careful consideration of the public interest by the law-makers. The result is that a measure enacted to benefit one group may be in conflict with one enacted for another group. For instance, it is inconsistent for our government to be trying to collect the debts due it by foreign governments at the same time that it is maintaining high tariffs in an effort to restrict the volume of imports into this country. It is equally illogical for it to adopt measures calculated to raise the wages of labor at the same time it is seeking to reduce the volume of unemployment. Such policies as these are an indication of the lack of general planning.

General economic planning would seek to fit all phases of our economic

life into a nicely articulated whole. It would have the processes of production, consumption, and distribution all carried out in accordance with schedules carefully drawn up in advance and directed by some central agency which had power to control the whole. Clearly, no other body than the central government would be adequate for this purpose. We may define *general economic planning,* then, as *the supervision and control of economic activity as a whole by a governmental agency or agencies, on the basis of a carefully formulated, unified, plan.*

The Objectives of Planning.—The objectives of general economic planning would probably be similar to those which were set forth in the opening paragraph of this chapter as the goals of economic progress. The planning agency or agencies would seek to promote a continuous increase in the national real income, to improve the kind of goods that go to make up that income, to decrease the waste of effort and resources involved in production, and to diffuse the product of industry as widely as possible among the people. In addition to these general aims, however, a planned economy would be directed especially at remedying certain of the more conspicuous defects of the present system which are manifested in business instability. The severity of the Great Depression has given this need for stability very great emphasis. It is a goal upon which all classes of society could unite. The capitalist needs stability to free him from the uncertainties and losses of depression. His well-being depends upon the smooth and steady continuance of business enterprize. The wage-earner needs stability to protect his earning power. Without stability he has no assurance of steady employment, and without employment he has no assurance of a livelihood for himself and his family. Profits, savings, wages, the protection afforded by insurance—none of these things is secure without stability. Therefore, it is this, above all, that planning would be expected to achieve. But stability is not lack of movement; it is merely the absence of interruptions and irregularities in movement. Therefore, planning would work for smooth movement in an upward direction, a scheduled, steadily rising trend of production, with increasingly wide diffusion of the fruits thereof among the masses. This would be promoted by maintaining a balanced equilibrium in the economy as a whole, while directing our expanding productive power into desired avenues of growth.

Is General Economic Planning Compatible with Capitalism?—The account of socialism given in an earlier chapter pointed out that general economic planning is an integral part of the socialist program. In fact, the socialists were among the first to entertain this conception. We have seen that the communists, building upon socialist foundations, have actually introduced such planning into the Soviet Union. Economic planning is relatively easy to carry out in a socialist economy, because there, all, or nearly all, of industry is owned and operated by the state. This gives the govern-

ment ample authority to formulate plans for industry in its entirety and to direct the detailed execution of the plans in the various producing establishments. But capitalism relies mainly on scattered, privately owned enterprizes, operated by the individual decisions of their proprietors, altho subject to some governmental regulation. In this system each person is still free, within fairly wide limits, to follow his own judgment on such matters as whether to spend or save, where to invest his savings, what business enterprizes to promote, what and how much to produce, and what and how much to consume. Prices are still left mainly to the play of demand and supply, operating in free markets. In a system of general economic planning, many of these things would have to be changed. How much was to be saved, where it was to be invested, what was to be produced, and in what quantities, where people were to work, perhaps even what prices and wages were to prevail would have to be planned by the central planning authorities. This raises an important question: Is general economic planning compatible with the capitalist system? Would not planning necessitate the abolition of free enterprize, and would it not require such restrictions on the individual's control over his property as to make the private ownership of property almost meaningless?

Some economists answer these questions in the affirmative. They believe that genuine economic planning is only possible in a socialistic society. They say that economic planning cannot be made effective without virtually abandoning free enterprize, free markets, free competition and the right of private property. Suppose, they reason, that a planning body decides, after careful study, that, in order to protect the economic process from lack of balance, cheap housing and cotton goods production should be increased, while automobile manufacture and office building construction should be decreased. Some capital, management and labor in the curtailed industries will have to be driven out under compulsion, while capital, management and labor will have to be drafted for the industries whose expansion is ordered. What becomes of liberty under these conditions? And of what use will it be to own property (an automobile factory, for instance), if one cannot use it according to his own best judgment? It might just as well be collectivized, if the owner cannot control its disposition. Consider the position of the investor. Perhaps he foresees an expansion in the demand for automobiles, but does not believe that low-cost housing will be profitable. He is nevertheless refused the privilege of investing in the auto industry, and may have no alternative but housing. Even the consumer, it is said, would not have freedom of choice, for every restriction on production restricts the opportunities open to the consumer. If not enough autos are produced to satisfy the demand, one must spend one's money elsewhere. There is also a question as to how new inventions would be promoted. Under the present system, anyone is free to put his new ideas into effect on his own initiative, if he has the capital, or can persuade others to finance him, but in a planned

economy, he would have to secure permission from the planning authority.

Other students, however, believe that it would be possible to have a considerable measure of planning within the general framework of capitalism. They reason that, under the present system, opportunities for investment, production, employment and consumption are limited by what the market makes possible, and that planning would only substitute intelligent guidance for the hit-or-miss guesses that now prevail. A decision to curtail automobile production would not be made arbitrarily, but because a condition of unbalance was foreseen. Investors, producers, and laborers would thus be enabled to prevent a mistake before it occurred, instead of correcting it after bitter experience had revealed it to them. Because it would help industry, instead of hindering it, they believe that the voluntary coöperation of capital and labor could be enlisted in carrying out the plans. To further this end, they would provide organizations in each industry thru which investor, manager and labor groups could have representation on boards of control. With this democratic machinery, and with the superior information which the planning authorities would be able to put at their disposal, they believe that business and labor groups would realize that it would be to their advantage to shape their policies in accordance with the plans. This does not mean that no coercion need be resorted to. There would have to be regulative machinery, but the amount of interference in the affairs of private businesses need not be much greater than that which is already effective in the field of public utilities, where private ownership and management of industry still function.

Planning With or Without the Price System.—The answer to the question raised, whether or not general economic planning is compatible with capitalistic institutions, depends partly on the type of planning which is contemplated. Some persons conceive of planning as a substitute for the guidance of economic activity afforded by the price system. In this view, the central planning authorities would decide what was to be produced, where people were to work, and what goods consumers were to receive, not by the interplay of the forces of demand and supply, but on some other basis. Presumably, the planners would draw up some estimate of human needs, on the one hand, and productive resources, on the other, and they would make decisions based upon the resulting calculations. Schedules of production and consumption would be drafted accordingly. The various producing establishments would then be directed to produce certain outputs of stipulated goods, and these would be rationed among consumers in accordance with the plans. Something of this sort is the ultimate ideal of the communists. It represents the radical extreme of planning.

A more moderate conception of planning would allow the price system to function very much as it now does, but would attempt, thru the intelligent guidance of production and thru careful management of the monetary

system, to achieve a better balance between demand and supply than is possible in an unplanned system. As the price system now functions, each enterprizer is guided by his independent judgment of the market possibilities. The information at his disposal, on which to base his judgment, is inadequate. He has a very incomplete knowledge of the market for his product; he knows little of what his competitors are going to do; and he is not informed about developments in other industries or in other places which may affect his business. Besides, he is the victim of a monetary system whose vagaries upset all his calculations. It is argued that the central planning authorities could see the economic picture as a whole. They would have facilities for gathering complete information about consumption, production, prices, costs, profits, etc., in the various branches of industry. Therefore, they would be much better able to forecast the probable trend of demand, production, and prices in the various branches of economic activity than individual business men can now do. They should, therefore, be able to draw up schedules for the guidance of business which would keep prices much closer to their normal than is at present possible, and which would keep the whole industrial process in approximate equilibrium. And, equally important, they would control the monetary system in such a way that the equilibrium would not be disturbed by monetary factors. In this conception of planning, prices would be the guide for the planners, and industry would be adjusted accordingly. In some cases it might be advisable to depart from the strict logic of the price system. It might seem desirable to subsidize some industries at public expense, as we now subsidize our merchant marine. In other cases it might be deemed wise to offer services free to consumers, as we now provide free public schools and highways. But in the main, demand and supply would be allowed to follow their natural channels. Consumers would be free to choose such commodities as they desire within the limits set by their incomes, and there could still be competition among producers, both for the patronage of consumers and for securing the agents of production. This kind of planning, therefore, might not represent so wide a departure from capitalism as it at first appears.

Self-Planning by Industries.—A number of leading industrialists in the United States and elsewhere have expressed themselves in favor of certain loose schemes of economic planning. However, what they advocate is designated more properly as partial than as general planning. Business men want the privilege of coöperating among themselves without being prosecuted under the anti-trust laws. To this end, they favor giving trade associations, or other organizations of producers, powers to bring the members of their industries together for the purpose of making agreements concerning output, prices, and perhaps broader matters, such as unemployment insurance systems, with the general objective of "stabilizing" the industry. Something of

this type of planning was embodied in the NRA codes, altho these went further, by including labor groups in the code-making procedure, and wage and hours provisions in the code regulations.

Altho the motives of many of the men who advocate these plans are good, the general effect of allowing interested industrial groups to plan for themselves would be inimical to the best interests of the general economy. In practice, the regulations adopted would nearly always involve restricting the output of the industry concerned and fixing minimum prices at relatively high levels, so as to reduce competition and protect inefficient producers. The community in general would pay for this by lower real incomes and higher prices, whereas the goal of economic planning should be abundance of output, making for larger real incomes. Planning could not contribute to a balanced industrial society unless each trade association was forced to make its decisions on the basis of the general welfare, rather than on that of greater profits for its own members. This is the fundamental defect inherent in all planning within the limits of single industries. The business men argue that the stabilization which would result from self-planning by industries would indirectly promote the public welfare. There is an element of truth in this, but the gains would be offset by the losses to consumers. Plans of this sort are concerned too much with the difficulties which confront enterprizers, and not enough with those which afflict other classes in the community. Effective machinery for the protection of these other classes is required. Therefore, while planning by representative industrial groups might properly constitute a part of a more comprehensive planning structure, it should be under the careful supervision of a more general planning authority.

The Machinery and Procedure of Planning.—The more moderate advocates of general economic planning visualize a democratic organization built as far as possible on the foundations laid by existing institutions. They favor the establishment, first of all, of an Industrial Planning Council in each branch of industry, such as steel, or coal, or cotton textiles, or agriculture. The membership of these councils would consist of representatives of investors, enterprizers, laborers, and consumers, whose interests were closely identified with the industry concerned. This would assure participation in the plans by those who would be most affected thereby, and the coöperation of those groups in their execution. Where strong trade associations exist, they could be made the nucleus of such councils, altho changes would have to be made to allow representation of other groups, such as workers and consumers. Existing labor organizations could be used in conjunction with the trade associations to provide some kind of joint machinery. Where there still exist remnants of the code authorities set up under the National Recovery Administration, these might be developed into the councils suggested. The function of the industrial councils would be to gather

data concerning used and unused plant capacity, the amounts of different kinds of labor required and employed or available, the actual and potential sales of products, the wages, costs of production, prices, profits, the volume of investment, the trend of growth, and other pertinent information for each industry. On the basis of such data, the councils would draw up programs for investment, output, employment, costs, and probable receipts, in their respective branches of production for the visible future. There would also be proposals for allocating the anticipated output among the individual enterprizers engaged in the industry, in accordance with their respective capacities, or on some other equitable basis. Conceivably, the various concerns might be asked to submit bids in advance, indicating the products they were prepared to deliver at given prices. The councils, however, would not have power to make their plans effective until approved by higher planning authorities. Otherwise the abuses and mistakes of self-planning, which have just been set forth, would not be avoided.

To achieve the needed coördination of plans originating with the Industrial Councils, there would be a National Economic Planning Commission. This very important body would be an arm of the Federal Government. It would be composed of men selected for their knowledge of economic problems and for their integrity. High salaries would have to be paid to attract persons of superior ability. To protect them from political pressure and safeguard their independence of judgment, their tenure of office would be long, while to secure continuity of policy, their terms would be so arranged that only a fraction of them would retire each year. The National Planning Commission would need a large staff of statisticians, accountants, economists, experts in the various industries, stenographers, clerks and other assistants. In a country as large as the United States, subsidiary State or Regional Commissions would probably be necessary; but in smaller countries these would not be needed. The Commission would need to be clothed with sufficient authority to compel corporations and individuals to supply it with such information concerning their businesses as it needed for the formulation of its plans, and to prescribe the forms on which these data were to be reported.

The plans tentatively formulated by the Industrial Councils would be submitted to the National Economic Planning Commission for coördination and unification. On the basis of these plans and the data in its possession, the National Commission would then draw up super-plans for the entire economy, for one-year, five-year, and perhaps longer periods. The super-plans would specify, for each industry, the expected output for the ensuing period or periods, the number of workers to be employed, the amount of capital replacements and new capital to be constructed, and the probable costs, wages, selling prices and profits. They would indicate the markets where the resulting products would presumably be disposed of, with the amount of con-

sumption planned for each. For the labor organizations, including the system of national employment exchanges which would certainly be called for in any comprehensive system of economic planning, they would state the opportunities for employment that were anticipated for each class of labor in each locality. Provision would also be made for training the necessary workers so that they would be available in the required amounts to fulfill the future plans. There would surely be a system of managed currency, so that the plans would stipulate the amount of money or credit to be created each year, and where it was to be allocated, the general objective being to maintain a neutral or stable monetary system, in which there would be no marked fluctuations of the price level. Many other details would have to be taken care of. The total would constitute a sort of industrial budget or schedule for the guidance of the nation's economic life, so designed as to make the fullest possible use of existing resources, provide full employment for labor at the best available wages, preserve a balance between the several branches of industry, and promote the general aims of economic progress outlined in an earlier paragraph.

In a democracy, the National Planning Commission would have only advisory powers. It would not be consistent with democratic principles to grant it authority to compel all business enterprizes to comply with its proposals. Final adoption of the plans would be left to Congress. The comprehensive plans drawn up by the National Commission would be submitted to the latter like a general appropriation bill, and they would be open for the fullest discussion and revision by the Senate and House of Representatives. When finally enacted into law and approved by the President, they would then become binding upon industry.

After the plans were adopted, there would have to be appropriate administrative bodies to supervize their execution. There might be an administrative branch of the National Economic Planning Commission to perform this function, or there could be created a separate National Planning Administration. The same would hold true for the several industries: execution of the plans might be entrusted to the Industrial Councils, or separate administrative bodies could be set up for that purpose. The administrative body in each industry would carry out the details of the plans adopted, apportioning production quotas among members of the industry and enforcing compliance with the adopted schedules on the part of individual enterprizes and labor groups. Execution of the plans need not involve the rationing of consumers or the drafting of capital or labor; people might still be left free to spend their incomes as they pleased among the products available, and to choose the channels of investment, production, and employment which they prefer, within the opportunities made available by the plans. Prices and wages might have to be regulated, altho this would not necessarily be the case. The degree of regulation necessary in these matters would depend on

how successfully the plans succeeded in anticipating what demand, investment, and production in the various industries was likely to be. In any case, enterprizers would be free to direct the technical process of production in their establishments in accordance with their best judgment, to buy such materials and employ such labor as was available at existing prices and wages, and to make profits by effecting such economies from efficient production and reduction of costs as careful management might make possible. The amount of interference involved in the details of business operations might not be any greater than those to which railroads are now subjected under the Interstate Commerce Commission.

The Basic Factual Survey.—One of the major tasks of the planning authorities would be to prepare and keep up to date a basic factual survey, designed to reveal in detail the consumptive and productive capacity of the nation. This would require a census of consumers designed to record, not only what goods they now possess and habitually buy, but what things they need and would presumably purchase if they were fully employed at the best wages which the economy was likely to afford. The survey would include an inventory of dwelling houses and their equipment of bathrooms, heating plants, furnishings, etc. The requirements of the population for food, clothing, automobiles, radios, recreational facilities, and the like, would be estimated. The people would be classified according to their occupations and educational attainments, from which data their actual and possible earning capacity could be computed. On the basis of such a survey of consumptive capacity it should be possible to estimate with tolerable accuracy the probable demand for consumers' goods for some time in the future. It would also be possible to ascertain the amount of savings which would be available for investment. Over against this would be set a survey of productive capacity. This would involve a census of all the land in the country, classified according to mineral deposits, fertility, climatic advantages, and location, as a basis for estimating its availability for production. The number of farms would be counted, and a record made of their equipment. Factory buildings, mines, and other producing establishments would be appraised in respect to their condition, the kinds of production for which they were suited, their probable life, repairs that were needed, and other pertinent information. Financial institutions would be included in the inventory with a record of assets, cash reserves, deposits, bank clearings, etc. The facts about labor, mentioned in the survey of consumptive capacity, would also be needed here. Finally, complete information about costs, prices and profits in each business enterprize would have to be obtained. All these data would afford a basis on which to build schedules of production and consumption.

The Possibilities and Weaknesses of Planning.—Two important advantages may be claimed for such a system of general economic planning as has been described. In the first place, the data made available to the plan-

ning commission thru the basic factual survey would enable it to function on the basis of much more complete and accurate information than is now at the disposal of independent individuals or groups. In the second place, planning would make possible the coördination of myriads of decisions that are now made independently. When each person decides his policies without complete knowledge of the whole economic picture, mistakes are made which make it impossible for demand and supply to remain in equilibrium. There is overcapacity in one industry and undercapacity in another—too much production here and too little there. Altho these errors are corrected in time by the subsequent reactions of prices, there may be a serious condition of unbalance in the interim. The submission of individual plans to a central planning body should enable it to know what the contemplated totals in each industry would be, and to compare these with the estimated total demand, as well as with the total resources available. This would reveal any unnecessary duplication of facilities and any failures to meet anticipated demands. It should permit the guidance of investment and employment away from industries where there appears to be overexpansion toward industries where there is underdevelopment. It should show whether or not the total schedules will make use of all existing resources, including labor, and if not, the survey of consumptive capacity should indicate how the unused factors may be employed. In this way, planning should make it possible to maintain a full level of economic activity along with balance between its various parts. This the present system of unplanned economy does not achieve.

There are certain difficulties to be weighed against these advantages. There would be less freedom of enterprize, less individual liberty, more restrictions on property rights. Critics doubt if the gains would compensate for this loss of freedom. So vast an undertaking as planning the entire economy of a nation in detail might prove too much for our political institutions. Democratic governments, with their group pressures and their changing administrations, do not adhere to a consistent policy as readily as dictatorships. A democracy might not be able to keep to a charted course. There is also the possibility that individual initiative would be stifled, and industry paralyzed in the grip of a clumsy bureaucracy. Finally, the price system might be so interfered with that whatever efficacy it has as a guide to economic activity would be destroyed utterly, leaving the planners no other criteria to direct our economic life than common sense, or intuitive judgment. Mistakes might be made, affecting the whole economy, which would prove disastrous.

Whether these difficulties would prove to be insurmountable we cannot know positively unless and until democratic countries experiment with planning. Such experimentation is perhaps justified by the fact that state intervention in economic matters seems destined to increase. The growing complexity of our problems necessitates more and more regulation. If we are going to have control, it had better be planned than unplanned. And if those

are right who assert that capitalism is evolving into some other system, such as socialism or fascism, the introduction of more conscious planning now should help to make the transition more orderly and less catastrophic.

B. A Constructive Program of Economic Progress

The Evolutionary Character of Our Program.—The measures of economic reform advocated in this volume constitute, in a sense, a general plan for the improvement of our economic institutions. They are a sort of chart of progress, which a planning body might use in formulating its long-run program. It is not, however, a program of radicalism. It is based upon the assumption that the future society, however it may differ from the existing order, will evolve gradually from it, and that the continuity with existing institutions will not be abruptly broken. We have assumed that each problem of maladjustment in the present order must be handled scientifically, by making a careful study of the defects to be corrected and their causes; and that the solution is to be found by the application of economic principles. An intelligent planning commission would approach its task in similar fashion. The program which emerges from such an analysis must rest upon a recognition that such basic institutions as those of free enterprize, competition, the price system, and private property play a useful rôle in society; but our study has revealed that integration is reducing competition, and that the price system is not perfect, and that in some cases the private ownership of property is not conducive to the social welfare. Hence the program must recognize the need for some modification or control of these institutions. Conscious control and unity in the industrial system are obtainable only thru some form of collective organization. By whatever name it be called, such collective organization is in fact a government. This we have assumed thruout our discussion, and it was explicitly stated in Part V that the functions of government must be increased. But the collective control of industry must not proceed faster than progress in the integrity and efficiency of government permits. We must intrust increasing powers of control to our public officials only in so far as they show themselves capable of handling this power. If government regulation is to be the principal medium of economic progress, it is not the only one. There is also much room for independent action, and our consideration of various economic problems has shown that great improvement can be made by business men in the efficiency of management and the stabilization and coördination of business, thru individual action or thru trade associations. Much can be done, too, by laborers, individually or thru their unions, to improve their efficiency and that of industry generally. Finally, education, by bringing to the masses a better understanding of economic and political problems, and by teaching

them to live more healthfully, morally, and efficiently, can do much to aid in bringing about the needed measures of reform.

It is on such assumptions, and with this attitude, that we have endeavored to apply the principles of economics to the problems of economic life. The program which our study has developed may now be brought together and presented as a whole. It will be most convenient to do this in outline form.

The Program in Outline

I. Consumption must be improved, in order that production may be directed into the channels where it will contribute most utility, and in order that the income produced may be used in such ways as to yield maximum satisfaction.
  - (a) Consumers should be educated in wise habits of living, thru all available educational agencies.
  - (b) The government may suppress flagrantly injurious modes of consumption, by prohibition of the narcotic traffic, brothels, and the like.
  - (c) Consumers can be protected from deception by:
    - (1) Legal suppression of adulteration, misbranding, short weights, etc., and dissemination by the government (*e.g.*, the Bureau of Standards) of accurate knowledge about the quality of merchandize offered for sale.
    - (2) Voluntary action on the part of business men for maintaining better business ethics, as, *e.g.*, by "better business bureaus" and the truth-in-advertizing movement.
    - (3) Private organizations to give consumers information about the things they buy.

II. The wastes of production must be reduced to a minimum, and the general efficiency of the productive organization improved, in order that per capita income may be made as high as possible.
  - (a) Despoliation of natural resources must cease.
  - (b) The average efficiency of management in industry must be brought to the level already attained by the most effectively managed concerns. This involves the more general adoption of scientific methods in the solution of management problems. Illustrations of such methods are:
    - (1) The scientific selection of plant location.
    - (2) The use of modern building construction.
    - (3) Efficient production planning.
    - (4) Scientific job study.
    - (5) The adoption of an "efficiency wage" plan.
    - (6) The development of an efficient personnel department.
  - (c) The tendency toward integration in industry should be recognized and encouraged, in order to achieve the advantages of large-scale economies, the elimination of competitive duplication, and the coordination and stabilization of the various stages in the successive division of labor; but it should be accompanied by government regulation designed to:
    - (1) Check the abuses of monopoly.
    - (2) Insure that the financial provisions of consolidations are not detrimental to the public interest.

Note: The machinery and scope of such regulation is further developed below in V, d and e.

(d) The loss of productive power occasioned by strikes and lockouts, and by the generally poor morale which results from discontented labor, must be prevented by the adoption of policies calculated to promote industrial peace between labor and capital. Among such policies may be mentioned:

(1) The encouragement, by private and governmental agencies, of conciliation and mediation in industrial disputes.

(2) The granting of power, to suitable governmental agencies, to investigate and make known the facts involved in disputes between capital and labor.

(3) Recognition, by employers and the state, of the necessity and desirability of labor organizations, and maintenance of the right of labor to strike.

(4) Removal of the underlying causes of industrial unrest, by general improvement in the wages and working conditions of labor. (See other parts of this program, especially II, b and e, and IV, c.)

(5) The establishment of greater mutuality of interests between employers and employees, especially by joint representation in management thru such plans as shop committees and labor-co-partnership.

(e) The social insecurity now resulting from accidents, occupational diseases, premature old age, and unemployment, should be eliminated as far as possible, and social security guaranteed to the workers. Measures suggested for these objectives are:

(1) Governmental supervision to insure accident prevention and healthful working conditions.

(2) Industrial training of young, and unemployed adult, workers.

(3) A better organization of the labor market, thru a national system of labor exchanges.

(4) Control of business cycles, along lines suggested below, in III, c.

(5) Spreading the burden of unemployment, by reducing working hours during depressions.

(6) Public works during times of depression.

(7) The general extension of social insurance to cover compensation for accidents, sickness, old age invalidity, and unemployment to all wage-earners. This calls for increasing the scope of the Social Security Act.

(f) The gains of increased production must be conserved by the prevention of overpopulation. The population should be kept at the optimum level, which yields maximum per capita. Methods of promoting this are:

(1) Education of the masses, particularly of the lower classes, concerning methods of limiting births.

(2) The restriction of immigration.

(3) Eugenic encouragement of reproduction among the superior stocks (thru education), and prevention of reproduction among conspicuously inferior stocks (thru incarceration and sterilization).

III. The organization of exchange must be kept at a high level of efficiency, in order that trade may be carried on in the proper direction, and free from interruptions, irregularities, or uneconomical restrictions.

(a) The present organization of marketing, with its machinery of middlemen and speculative exchanges, must be recognized as necessary and reasonably efficient. Its improvement must depend upon:

(1) General advance in the management of individual marketing businesses, along the lines indicated in II, b and c.

(2) The integration of marketing units as a general phase of industrial integration.

(3) The development of coöperative buying and selling organizations among consumers, retailers, farmers, etc., where feasible.

(4) The elimination of speculation of the gambling type by appropriate exchange regulations and their rigid enforcement, under government supervision; also by the more careful control of brokers' activity by a system of federal licenses.

(b) The general economy of the competitive price system should be preserved, but certain difficulties in its operation need correction, in the form of:

(1) Greater equalization of incomes (see IV, a, b, and c), in order that consumers' price offers may accurately register social needs.

(2) Reduction of the folly and ignorance of consumers in making their purchases, along the lines suggested in I.

(3) Occasional government control to adjust supply to demand where the equilibrium of demand and supply is badly upset by over- or irregular production.

(4) The maintenance of prices at bulk-line costs by appropriate regulating agencies (see V, d and e), where excessively high or discriminatory prices are maintained by monopolies or collusion among different producers.

(5) The regulation of public utility rates by public utilities commissions, the rates being set so as to cover the costs of service, including a fair return (at competitive market rates) on the fair value of the company's property.

(c) The disastrous fluctuations of the business cycle must be reduced to a minimum. Means suggested for stabilizing business cycles are:

(1) Improvement in the control of our money and credit institutions as suggested below in III, d, and e.

(2) Stabilization of the price level, as suggested in III, d.

(3) The long-range planning of public works, as suggested in II, e, 6.

(4) The accumulation of unemployment reserve deposits during prosperity to be paid to unemployed workers during depressions.

(5) The promotion of flexible prices and costs, especially wages.

(d) The disturbing effects upon creditors, debtors, wage-earners and enterprizers, occasioned by fluctuating price levels, should be corrected by the creation of a neutral monetary unit or one of stable purchasing power. The most likely measures for accomplishing this are:

(1) Adoption of the compensated dollar plan, supplemented by—

(2) Rigid control of bank credit, in the interests of a stable price

level, by the Federal Reserve banking authorities, as suggested below.

(3) It may eventually prove feasible to abolish the gold standard in favor of a controlled paper currency.

(e) The medium of exchange in modern society is so largely composed of bank credit, and the smooth functioning of banks is so vital to the orderly operation of business, that it has been found necessary to centralize and regulate the banking machinery. The control of banking thru the Federal Reserve System should be extended and strengthened. There is needed:

(1) More careful study and supervision of the operations of banks in providing fixed capital, and in acting as savings and fiduciary institutions.

(2) Closer coöperation and unity between state banks, state bank supervision, and the Federal Reserve banking system.

(3) The consolidation of banks into large institutions with branches, in place of the present system of scattered small banks.

(4) The extension of banking control so as to help stabilize the price level and the business cycle.

(5) Monopoly of the power to create credit by the state, with 100 per cent cash reserves required of the banks.

(f) The trade barriers which now interfere with the economies of international specialization should be gradually removed, except in the few cases where protection may be justified. This would involve:

(1) The extension of reciprocity agreements between nations, thereby lowering existing tariffs.

(2) The maintenance of a permanent tariff commission, with definite power to control our future tariff policy.

(3) Temporary protection of infant industries which promise to develop a comparative advantage, and permanent protection of a few vital key industries (but there is little real need of either type of protection in the U. S.).

(4) Where encouragement of certain industries is deemed wise, it should generally be in the form of bounties, rather than of protective tariffs.

(5) A form of international control of raw materials may be necessary.

(6) International coöperation for the reduction of foreign exchange control and gradual restoration of freer trade adjustments.

(g) The perplexing economic relations between nations (especially between the U. S. and Europe) which arise out of international debts and financial imperialism render desirable adoption of the following policies:

(1) Cancellation of European debts to our government.

(2) Give every possible support to any movement directed towards a stronger international organization as a device for the control of imperialism.

(3) Assumption by business men of the risks of investment in foreign countries without the military support of their government.

(h) Agriculture must be adjusted in balance with other industries by:
  (1) Integration of farms into larger units with adequate capital equipment, assisted by—
  (2) Special facilities for agricultural credit along lines already established.
  (3) Men should be especially trained to manage such farms by agricultural schools and colleges.
  (4) Our land should be surveyed and classified by a public commission, each type being put to its most profitable use, and sub-marginal crop lands being converted into forest reservations or parks, by government purchase, if necessary.
  (5) Farm owners and laborers who are not prospering should be assisted to more remunerative occupations by the national employment service recommended in II, e, 3.

IV. The extreme inequality of incomes which now prevails in society should be reduced, in order that the benefits of progress may be as widely diffused as possible; but perfect equality should not be sought, for it would weaken the incentives to production and destroy the economy of the competitive price-distribution system.

(a) A program for the reduction of inequality should not suppress the earned incomes (which include interest, most wages, and a part of business profits); but it should aim to prevent the receipt of unearned incomes (such as the rent of land, monopoly wages, certain elements of profits, and those derived from inherited wealth).

(b) Excessively high incomes can be reduced by:
  (1) Gradually increasing the taxation of bare land, exclusive of the improvements thereon.
  (2) Checking the acquisition of large unearned profits thru business stabilization, monopoly control and the regulation of business practices (see III, b, c, d and e, and V, d. and e).
  (3) Steeply progressive taxation of inheritances (see V, b, 5).
  (4) Progressive taxation of incomes (see V, b, 2).

(c) Low wages (the principal source of low incomes) can be increased by:
  (1) Increasing the quantity of capital (thru the encouragement of thrift).
  (2) The restriction of population growth, especially among the unskilled workers, by the curtailment of immigration, the reduction of the birth rate among the poorer classes, and eugenic measures generally.
  (3) Equipping labor for work of a higher type by education (especially vocational training) and general measures of social reform.

V. Government must be expected to play an increasing rôle in industry, in order to coördinate it, to correct abuses, and to carry out various elements of the general reconstruction program here defended; but its functions can only be extended *pari passu* with general improvement in its integrity and efficiency. The increased expenses attendant upon the expansion of government require improvement in our present revenue system.

(a) Efficiency and economy in financing the operations of government should be strengthened by:

(1) Improvement and extension of the budget system of estimating expenditures and receipts, in federal as well as state and local financing.

(2) The restriction of government borrowing to legitimate short-time financing, necessary permanent public works, and great emergencies, with provisions to insure the liquidation of such loans within a reasonable time.

(3) For other needs the government should depend upon fees, licenses, and taxes—especially the last.

(b) The revenue system of the United States needs to be greatly improved, so that it will distribute the burden of taxation according to the just principle of ability to pay (progressive taxation), and so that it will conform to the principles of sound tax administration. This will require the following reforms in our system of taxation:

(1) Correction of the confusion of jurisdictions, by having the federal government derive its revenues from income taxes, and customs and excise duties; the state governments from income and inheritance taxes, and various corporation and business taxes; and local governments from real estate taxes, and licenses and fees.

(2) Improvement of the present federal income tax, by scientific classification of the sources of income, impartial assessment of incomes by qualified assessors, and publicity of income returns.

(3) Abolition of the present federal tax on corporate incomes and the substitution of a revised undivided profits tax. The principle of such taxes should be given an adequate trial.

(4) Amendment of the Constitution so as to permit federal taxation of state and local government bonds.

(5) Abandonment of inheritance taxation by the federal government and extension of its use, with uniformity of provisions, by state governments.

(6) Abolition of the general property tax and its replacement by taxes on real estate (especially land), with the assessment thereof placed in the hands of competent assessors selected thru the civil service system.

(7) A reduction in the use of the sales tax because of its violation of the principle of ability to pay.

(c) Governments must regulate the conditions of employment in industry, especially for women and children, and must provide adequate inspection and enforcement machinery. Especially, there should be laws:

(1) Fixing maximum hours of employment for women, children, and adult males in certain taxing occupations.

(2) Fixing the minimum age at which children may be employed.

(3) Establishing minimum wages in sweated trades.

(4) Avoid sweeping wage and hour legislation that will involve rigid state control; such control is likely to interfere with the flexibility of the price system, to the detriment of balance in the economy.

(d) Trusts should be regulated—not dissolved—in order that the advantages of integration (see II, c) may be retained without the abuses

of monopoly. Abusive business practices, whether by monopolies or competing concerns, should be suppressed. Measures to achieve such regulation are:

(1) The granting to the Federal Trade Commission of powers of control similar to those now exercized by the Interstate Commerce Commission.

(2) The suppression of excessive prices and discriminatory charges (compare III, b, 4), and unfair methods of competition.

(e) The present policy of regulating railroads and other public utilities, thru the Interstate Commerce Commission and state public utilities commissions, should be continued.

(1) These commissions should have authority to control the terms of the franchises under which public service corporations may operate, to fix the rates they charge, and to prescribe the service they must render. Holding companies must be brought under control.

(2) A plan of railway consolidation for the United States should be worked out and put into effect. Federal ownership may be necessary.

(f) Municipal, state, and national government ownership and operation of industry may be expected to increase gradually. This is advisable in the case of those industries which cannot be operated at a profit under private enterprize and those which develop socially undesirable features which cannot adequately be corrected by regulation.

(g) An approach toward a program of general economic planning within the general framework of existing institutions.

The Unity of the Program.—The inherent unity of this program is revealed by the interdependence of its various parts. Altho we have taken up each problem by itself, a study of the outline will show that it embodies a consistent and inseparable plan of economic progress. Many of the reforms suggested would be ineffective if not accompanied by other proposals presented at another point. As an illustration of this interdependence, consider the program for dealing with prices. This is based on the primary assumption that the competitive price system is economical, and should be maintained, because thru it production is guided toward the satisfaction of consumers' needs. But this will not be true unless consumers are intelligent and well informed enough to make their choices wisely, for it is these choices, reflected in price offers, which make up demand. We learned very early in our study that many things interfere with the wisdom of consumers' choices. The price system cannot function efficiently, therefore, unless our program for the improvement of consumption is realized. But even that is not enough. The price system reflects only those choices which are backed by purchasing power, and this is very unequally distributed. We know that, as a result of this, some insignificant whims of the very rich may affect production, thru the price mechanism, more than the pressing wants of the very poor. Hence

the price system will not prove entirely satisfactory until a greater measure of equality is achieved. Now, a survey of the means suggested for the reduction of inequality shows that this part of the program, too, is dependent upon the successful fulfilment of certain other parts. It involves, for instance, the taxation of incomes and inheritances, but these taxes cannot be considered apart from other taxes. They must be fitted nicely into a general scheme of taxation, along the lines proposed in Part V. Again, it is suggested that excessive profits will be reduced if measures of increasing business stabilization can be achieved, which involves the whole problem of fluctuating prices and the business cycle, which was considered in Part III. Then, too, the principle which we have adopted for the attainment of greater equality calls for the suppression of unearned incomes, and this carries us back to the measures we considered for the regulation of monopoly prices. We are back to the price system again! Nor is that all. It is our desire to increase the level of wages. One way to accomplish this is to restrict the growth of numbers in the lower strata of the population; but this is only one phase of that larger population problem which we discussed in another connection. Our analysis of productive efficiency is also linked closely to the question of inequality, for the differences in incomes which prevail in society play an important part in production as an incentive to exertion, while, on the other hand, the principal reason for seeking greater equality is to secure for the masses their fair share of the benefits of increasing production. In formulating our conception of economic progress, we placed the diffusion of income on a par with its increase, and pointed out that the latter would be of little benefit without the former. Again, in seeking means for eliminating waste and developing efficiency in production, we were led to defend the tendency toward integration; but we immediately found that this brought us face to face with the problems of monopoly, so that this part of our program is also tied in with questions of government regulation. In fact, the government must play an important rôle, thru one agency or another, in most of the projects we have considered. Therefore the discussion of the functions of government, and its relation to economic activity, cuts across the whole of our study.

This does not exhaust the list of connections between the various parts of our program, but it suffices to illustrate them. It must now be apparent that our method of taking one problem at a time and analyzing it in scientific fashion has not led to a heterogeneous or discordant set of proposals. The program to which it leads is as unified and as comprehensive as that of either liberalism or socialism; but it is believed that it is more constructive, because it builds carefully on the basis of existing institutions, favoring orderly modification where adequate reason for it can be shown, but not committing us fanatically to any one panacea. The carrying out of such a program should go far to advance society along the path of economic progress.

Summary

Economic progress consists of continuous increase in real income, made up of goods improving in quality, produced with decreasing loss of human and material resources, and widely diffused among the people. Altho economic progress is only one phase of general progress, it is important, for material wants must first be supplied before other aspects of life can be fully enjoyed. The belief of the classical economists that sustained progress is impossible, because population growth and diminishing returns bring profits to a minimum and lead towards a stationary state, is erroneous. They failed to realize the possibilities of progress in the arts and of the control of population growth. Progress has hitherto depended largely on independent individual initiative, but some propose that hereafter it be promoted by general economic planning. There is partial planning by private enterprize and by government in the present system, but such planning is uncoördinated and often inconsistent. General economic planning consists in supervision and control of economic activity as a whole by a governmental agency or agencies on the basis of a carefully formulated, unified, plan. Its objectives are those comprized in our conception of economic progress, with special emphasis on business stability. General economic planning has hitherto been closely associated with socialism, and is believed by some to be incompatible with capitalism; but others believe it can be built up out of capitalistic institutions, especially since capitalism is evolving in the direction of greater centralized control. If planning is construed as a substitute for the price system, it is communistic, but if construed as an instrument for achieving better balance within the price system, it does not represent a wide departure from capitalism. Self-planning by industries would not work for the general welfare; it is not *general* planning. A program of general economic planning would require the establishment of Industrial Planning Councils in each branch of industry, representing groups whose interests would be affected, and supervized by a National Economic Planning Commission attached to the Federal Government. Plans for each industry, drawn up by the Industrial Councils, would be coördinated into comprehensive national plans by the national commission and submitted to Congress for final adoption, after which their provisions would be carried out by appropriate administrative bodies. The plans would rest on a basic factual survey of productive resources and consumptive capacity. Economic planning offers the advantage of a better adjustment of demand and supply based on fuller information and coördination of individual acts than is possible with free enterprize; but it involves some loss of liberty and the danger of bureaucratic inefficiency.

The analysis of problems in this book leads to a series of suggestions which constitute an evolutionary program of planned economic progress.

The program was presented in outline form. Its essential unity and harmony are revealed by the interdependence of its various parts.

SUGGESTIONS FOR FURTHER READING

Chapter XXXIV of Henry R. Seager's *Principles of Economics* (3rd ed., 1923) gives an interesting discussion of economic progress. In a very different vein are the concluding chapters of Alfred Marshall's *Principles of Economics* (5th ed., 1907 or later eds.), Book VI, Chapters XII and XIII, which represent a scholarly survey of the relation between economic progress and the welfare of the wage-earning classes. A very stimulating book, painting an optimistic picture of the possibilities for welfare created by our economic surplus, is S. N. Patten's *The New Basis of Civilization* (1907). Professor T. N. Carver, in Part I of his *Principles of National Economy* (1921), outlines the various factors which are essential to the prosperity of a nation.

The literature of economic planning is becoming extensive. A thoughtful analysis, based on an evolutionary approach from capitalistic institutions, is to be found in G. D. H. Cole's *Economic Planning* (1935). An able, but more pessimistic, analysis is given by Alvin H. Hansen in Chapters XXXI, XXXII, and XXXIV of his *Economic Stabilization in an Unbalanced World* (1932). Barbara Wootton contrasts the unplanned economy of capitalism and the planned economy of Soviet Russia in her interesting book, *Plan or No Plan* (1935). Two somewhat popular treatments of planning are Stuart Chase's *The New Deal* (1932) and George Soule's *A Planned Society* (1932). A brief summary of a number of plans is included in J. G. Frederick's *Readings in Economic Planning* (1932).

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